

A STUDY ON VATHA KARAPPAN

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CERTIFICATE

This is to certify that Dr. A.K. Sumathi in year _____ participated in the Continuing Medical Education programme on VARMAM TREATMENT FOR JOINT DISLOCATION & VARMAM MASSAGE TECHNIQUES FOR HEMIPLEGIA held at conference hall, Special Therapy wing, at Government Siddha Medical College, Palayamkottai on 22.07.2011.

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Introduction

Vathakarappan

INTRODUCTION

The Siddha system of medicine is a gift to mankind by ancient Siddhars. Siddha system is basically related to the composition of the Universe and the human beings. Nothing can separate them individually; all are interrelated with each other.

The other systems of medicine, deal only with the prevention and the treatment of the disease. But our Siddha system of medicine not only deals with prevention and treatment but also prolongs the longevity of human life and also improves the quality of life. This is explained by Thirumoolar in Thirumanthiram 800 as follows,

“மறுப்பதுடல் நோய் மருந்தெனலாகும்
மறுப்பதுள நோய் மருந்தெனச்சாலும்
மறுப்பதினி நோய் வாராதிருக்க
மறுப்பது சாவையும் மருந்தெனலாமே”

The significance in Siddha medicine is the three humors (three thodam) theory. The humors (thodam) are vatha, pitha, and kaba. Diseases are explained as a disturbance in the equilibrium of the above said three humors. When these are in perfect balance and harmony, a person is said to be healthy.

“மிகினுங் குறையினும் நோய் செய்யும் நூலோர்
வளிமுதலா எண்ணிய மூன்று”

-திருக்குறள்

In Siddha system, the theory of Pancha Bhutham plays a major role in all aspects. The skin is also formed by the Pancha Bhutham. Skin is one of the components of prithivi (earth).

This is mentioned as

“சேரப்பா சடமாச்சு மண்ணின் கூறு
செறிமயிர் தோல் என்பிறைச்சி நரம்பைந்தாகும்”

- சதக நாடி.

Skin is formed by the combination of Mann+ Theyu. So if any derangements in theyu and its components such as sleep, thirst, appetite, firmness and unification, may affect the skin by disturbing the function of Saaram, Senneer, Oon and Kozhupu.

“வாத மலாது மேனி கெடாது”

So if any derangement in Vatha, may cause the skin hard and rough, black and reddish with intense pain. Man highly reflects the surrounding. Tactile sensation is achieved by the skin, with the help of vayu and it is also mentioned as,

“வளப்பங்கேள் பூமி வசிக்கும் நாசியில்
களப்பமாம் வன்னி தானுறங் கண்ணினில்
அளப்பமாம் போவடங்கிடும் நாவினில்
பளப்ப நல்வாயுவும் பரிசிக்குமெங்குமே
எங்கிய காதிலிருந்துறு மாதாயம்”

- திருமூலர் நாடி

If the function of kapha is altered in the body by the food and activities, it will lead to pallor of the skin and shiny or glossy appearance with intense pain.

Skin or integument is closely related with internal and external environments. If any changes occur within the body or in the environment it is reflected immediately over the skin by features like dryness, itching, etc., because skin acts as the linking media between the body and outer world. Skin is closely related with mind and soul. Slight distress and strain may cause pathological changes in the skin.

Eczema is the common problem all over the world. The incidence is about 2-3%. Eczema is a non contagious inflammation of the skin characterized by erythema, scaling, oozing and vesiculation. Eczema is a specific type of allergic cutaneous manifestation of antigen antibody reaction. It has been revealed that persons living in urban areas, working in industries and residing near industries, labours and farmers, changing lifestyles and food habits, allergic sensitive individual who suffer from diet and cosmetics are all commonly affected.

Seven types of Karappan are recognized in Yugi Vaithiya Chinthamani. Among the classification of karappan, the author has selected Vatha karappan for the clinical study of the dissertation work on the basis of siddha concept on course of the disease, diagnosis, prognosis, dietetic and preventive aspects.

Vatha Karappan, which can be compared with Eczema, is one of the most common skin disease encountered in medical practice all over the world. If it is not diagnosed early and given proper and adequate treatment, it may lead to chronic condition. It is a highly socio-stigmatic skin disease which upsets an individual both physically and mentally.

The author hopes that this work on Vatha Karappan would provide better information of the clinical trial with the selected drug undertaken at Government Siddha Medical College, Palayamkottai, with all available sources provided here.

Drug of choice:

1. Internal use

Perumarapattai chooranam 1gm with water three times a day.

Reference: Agasthiyar 2000 third part.Pg.no73

2. External use

Pungu thylum

Reference: Yugimuni Vaithiya kaaviyam.Pg.no 299

The author has reveals her study about the disease Vatha Karappan in the following pages.

Aim and Objectives

Vatha karappan

AIMS AND OBJECTIVES

Karapattan is a dermatological disease that causes many patients in despair. It is a major health hazard in the developing countries like India. People who live in densely populated areas with poor hygiene facilities, lack of personal and environmental hygiene, change in life style, diet habits, and use of artificial cosmetics, chemical constituents are the common factors that precipitate this disease. So when the disease once occurs, remission and relapse happens subsequently throughout the life of the patient. The frequency of relapse depends upon the individual immune power.

The author has selected this disease for the dissertation work to evolve a better treatment for getting rid of this disease, once for all. When selecting an appropriate drug to try, the author had decided to go for a pure herbal drug **Perumarapattai chooranam** internal and Herbo Mineral drug **Pungu thylum** external.

1. The principal object of this study is to have a clinical trial on Vatha Karapattan patients with trial drugs **Perumarapattai chooranam** (internal) and **Pungu thylam** (external).
2. To create awareness about the Siddha science and to highlight the efficacy of Siddha drugs among the public.
3. To have an idea of an incidence of Karapattan with reference to age, life style, occupation, socio economical status, family history, and seasonal variations.

4. To know how the disease alters the normal conditions under the topics of Mukkutram, Poripulungal, Envagai thervugal, Udar kattugal, Neerkuri and Neikuri.
5. To evaluate the biochemical and pharmacological analysis of the trial drugs.
6. To use the modern diagnostic parameters to endorse the diagnosis and follow the progression of the disease.
7. To make an awareness among the people about the prevention of the disease.
8. To know the extent of correlation of etiology, classification, signs and symptoms of Vatha Karappan in Siddha aspect with Eczema in modern aspect.

Review of Literature

Vatha karappan

Siddha Aspects

Vatha karappan

REVIEW OF LITERATURES

SIDDHA ASPECTS

கரப்பான்

இயல் (Definition):

உடலில் திமிர், தினவு, சொறி, புண், தடிப்பு, வெடிப்பு, நீர்கசிதல் ஆகிய குறிகுணங்கள் உண்டாக்கி உடம்பின் இயற்கை நிறத்தை வேறுபடுத்தும்.

நோய் வரும் வழி (Aetiology)

According to Yugi Vaithiya Chindamani,

“ஏழாந் கரப்பானின் உற்பத்தி கேளாய்
ஏற்றமாய் மாமிசங்கள் புசிக்கையாலும்,
கூழாந் கம்புதினை வரகு சாமை
பொடிதாந் கிழங்குவகை யருந்தலாலும்,
பாழாந் பெண் மாயை தன்னிற் சிக்கும்
பாங்காந் விரகத்தால் முயற்சியாலும்
தாழாந் பண்டங்கள் சமைத்துத் தின்னல்
தாக்குமே கரப்பான் தன் சாயல் தானே
சாயலாய்த் தனக்குத் தான் மூத்த பெண்ணைத்
தாவினோர் தாழ்ச்சியாங்சாதி தன்னில்
காயலாய்க் கலந்துண்டோர் கலகம் செய்தோர்
கற்புடைய மங்கையரைக் கருதினோர்கள்
வாயலாய் வாழ் மரத்தை வெட்டினோர்கள்
மருத்துவர்கள் வண்ணார் நாவிதர்கள் கூலிக்
கூயலாய்க் கொடா தோர்கள் குருநிந்தித்த
கொடும்பாவி கரப்பானிற் குறிக் கொள்வாரே”

- யுகி வைத்திய சிந்தாமணி
(கரப்பான் ரோக நிதானம்)

- Excessive intake of fish, meat, cereals like raagi, maize, and rhizomes.
- Anti social activities which ultimately end in psychic disturbances leads to Karappan disease.

According to Sirappu Maruthuvam,

“பெருகுஞ் சோள மிறுங்கும் பெருங்கம்பு
வரகு காருடன் வாழையின் காயோடு
உரைகொள் பாகல் கெளிற்று மீன் உண்டிடில்
விரிவ தாய்க்கரப் பானுமி குந்ததே”

- சித்த மருத்துவம் சிறப்பு

- This poem specifies the dietary relations with the karappan disease.
- Bitter gourd, ragi, maize, unripe banana, fish items aggravates the disease.

According to Guru Naadi Nool,

“சங்கையில் விஷ கரப்பான் வருமாறேது
சாரமுடன் கிருமி விழுந்தன்மையேது
உட்டிணமே அதிகம் வருமிந்திரிய போகத்தா
லுழறுதுருகி யத்தியிலேவேவு கொண்டு
நட்டணமாய் வெந்த தொரு மச்சை தன்னில்
நாட்டமிட்ட கிருமியதுயணுகும் போது
மட்டுடனே கிருமியெல்லாம் பறந்தங்கேறி
வகையுடனே மாங்கிஷத்தைத் துளைத்து மேவும்”
திட்டமுடன் விட கரப்பான் பறந்து மேலே
தினவுடனே பரபரத்துச் சொறியுண்டாமே
பயல்மொழியிர் தேகத்தில் கிருமிதானே
கரகரத்துச் சொறி பெருகுங் கரப்பான் தானே”.

- குரு நாடி நூல்

Excessive Sexual indulgence aggravates Azhal thathu which inturn affects the “Kozhupphu” and “Thasai” of the seven udal kattugal. The micro organisms enter through these affected thathus and cause the disease Karappan.

நோய் எண்(Classification)

1) According to Yugi Vaithiya Chindamani:

Karappan is classified into seven types.

“ஆமென்ற கரப்பான்தான் ஏழுவிதமாகும்
அடங்காத வாதத்தின் கரப்பானோடு
காமென்ற கண்டமாங் கரப்பானாகும்
கருகிய தோர் வறட்சியாங் கரப்பானோடு
தேமென்ற திமிர்வாத கரப்பான் நாலும்
சிரசினிலே பெருங் கபாலக் கரப்பான்
கோமென்ற பித்தமாங் கரப்பானோடு
பெரிய சேட்டுமக் கரப்பான் பெயர்தானே”

- யூகி வைத்திய சிந்தாமணி

1. வாத கரப்பான்
2. பித்த கரப்பான்
3. கப கரப்பான்
4. திமிர்வாத கரப்பான்
5. கண்ட கரப்பான்
6. கபாலக் கரப்பான்
7. வறட்சி கரப்பான்

2) According to Agasthiyar Rana nool, the Karappan is classified into eighty types as follows,

“எண்பது கரப்பான் தன்னை யியம்பிடுமாறு கேளீர்
நண்பிடும் வாதம் பித்தம் நலம்கெட்டுத்தானம் வீங்கும்
புண்பிடும் கரங்கள் சந்து புலைந்துடல் கடுத்து நோகும்
வன்மையுடன் வெடித்து சூலை வருவது ரணம்தென்னே”

- அகத்தியர் ரண நூல்

3) According to Rathina Surruka Naadi Nool, there are eighty five varieties of Vatha Karappan.

“நாளடா நாற்பது நாலு நூறு
நயமுடனே நாற்பத்து எட்டுரோகும்
பாரப்பா வாதமது எண்பத்து நாலு
பருக்கவே பித்தமது நாற்பத்து எட்டு
தாரப்பா சேத்துமங்கள் தொண்ணூற்றாறு
பீலியுடனுறு வசிய மஞ்சதாகும்
பொரிகரப்பான் தொன்னூறு கெண்டைபத்து”

- இரத்தின சுருக்க நாடி நூல்

4) As per Pathinen Siddhar Balavagadam, the Karappan affecting children is classified into eighteen types.

1. வாத கரப்பான்
2. பித்த கரப்பான்
3. கப கரப்பான்
4. அரி கரப்பான்
5. ஓடு கரப்பான்
6. சூலை கரப்பான்
7. வெடி கரப்பான்
8. மண்டைக் கரப்பான்
9. சட்டைக் கரப்பான்
10. ஊது கரப்பான்
11. கருங்கரப்பான்
12. பொரிகரப்பான்
13. கொள்ளி கரப்பான்

14. தோட கரப்பான்
15. வாலை கரப்பான்
16. வறள் கரப்பான்
17. வீங்கு கரப்பான்
18. செங் கரப்பான்

கரப்பான் நோயின் பொதுக்குறிகுணங்கள்
(General Signs and Symptoms)

“ எண்பது கரப்பான் தன்மையியம்பிடு மாறு கேளிர்

நண்பிடும் வாதம் நலம்கெட்டுத் தானம் வீங்கும்

புகைஞ்சமேனி லிங்கத்திற் புண்போலு ருக்கிப்

களைஞ்சமே நீரோடு மலமுங்சிக்கும் கசியுமே கரப்பானாம்”

-அகத்தியர் விரணநூல்

- Swelling all over the body.
- Pain in the joints of the body.
- Body temperature raises.
- Appearances of papules, vesicles which burst leads to ulcer formation.
- Oozing from the lesion.
- Itching all over the body.
- Scanty micturition and Constipation.

வாத கரப்பான் குறிகுணங்கள்:

According to Yugi Vaithiya Chindamani,

“கொள்ளவே உடம்பெல்லாம் வெதும்பாய் நொந்து

குடைந்துமே மிகச் சுரந்து மாகும்

விள்ளவே தேகமெல்லாம் புண்போல் நொந்து

வெடித்துமே புண்ணாகும் விரல்கள் சந்து

முள்ளவே மடங்கியே நரம்பு காணும்

மொழிகள் பக்கமிக்க இடமிக உலர்ந்து

மள்ளவே மேனியது வரண்டு காணும்

வாதமாங் கரப்பான்றன் வன்மைதானே”

-யூகிமுனி வைத்திய சிந்தாமணி

- The body temperature rises.
- The lesion starts as dry vesicles and later becomes exudative in nature leading to ulcers formation with secondary infection.
- The lesion are highly Itching in nature.
- Pain and swelling in the affected areas of flexures of upper and lower limbs (like wrist Knee, ankle joints, etc).
- Difficulty in walking due to swelling in the joints.
- The lesion show recurrence and come on and off.

According to Pathinen Siddhar Balavagada Thiratu,

“தெறிக்கும் வீங்குமுடலெங்கு மேதிமிர் கடுப்பதாகியழுந் தேகமேற்

பொறிப்பறந்ததெனவே புண்ணாகியதிலே வெடித்ததிக பொங்கமாய்

முறுக்கியே சுரமதாகி நாவது வறண்டு நோயது முதிர்ந்திடில்

வெறிக் கருங்குழலி மாதுவாத கரப்பானெனப் புகல்வர்மேவிட”

-பதினெண் சித்தர் பாலவாகட திரட்டு

- Excessive body heat
- pain and swelling all over the body
- Appearances of vesicles, exudates
- formation of ulcers
- Difficulty to use affected limbs due to pain and swelling
- Dryness of the body

According to Agathiyar Vaagadam,

“தலையுங்கனத்து குரல் நெரித்து தறுகா துடம்பு திமிருண்டா
யுளையுங் காலும் வீக்கமாயுளையாதிருக்கும் முறுப்புளையும்

யத்த நோய் வரிலே வாதகரப்பானென நினைக்கலாமே”

- Headache
- Hoarseness of voice
- Numbness
- Swelling
- Weakness
- Pain and swelling in the joints

PINIYARIMURAIMAI:

The method adopted to find out a disease in Siddha system of medicine is termed as ‘piniyari muraimai’. It is based on the following principles.

1. Poriyal arithal- These are the five sense organs.
2. Pulanal theruthal- These are the functions of the sense organs.
3. Vinathal – Method of interrogation.

The important method adapted by the Siddhars to diagnose the disease is by means of Envagai thervugal.

“நாடி ஸ்பரிசம் நாநிறம் மொழி விழி
மலம் மூத்திரமிவை மருத்துவராயுதம்”

- நோய்நாடல் நோய் முதல் நாடல் (1ம் பாகம்)

Envagai thervugal is considered to be physician's instrument and this can be understood by the above verse. Envagai thervugal constitute,

1. Naadi
2. Sparisam
3. Naa
4. Niram
5. Mozhi
6. Vizhi
7. Malam
8. Moothiram

1. Naadi (Pulse)

In the incidence of Karappan, the following naadi nadai were felt very commonly,

1. Vatha kapham
2. Kapha vatham
3. Vatha Pitham

2. Sparisam (Tactile sensation)

In the case of Vathakarappan, swelling, macule, vesicle, papule, itching, erythema, burning sensation, thickening, roughness of the skin, and pain were noticed.

3. Naa (Tongue)

No abnormalities are noticed.

4. Niram (Colour)

Redness and hyper pigmentation noticed in some cases.

5. Mozhi (Speech)

No abnormalities noticed.

6. Vizhi (Eye)

Burning sensation of the eyes is noticed in some cases.

7. Malam (Stools)

In some cases, constipation is noticed.

8. Moothiram (Urine)

Collection of urine for the determination of neerkuri and neikuri is a special diagnostic method.

“அருந்துமாறிரதமும் அவிரோதமாய்
அஃகல் அலர்தல் அகாலவூன் தவிர்ந்தழற்
குற்றளவருந்தி உறங்கி வைகறை
ஆடிக்கலசத் தாவியே காதுபெய்
தொரு முகூர்த்தக் கலைக்குட்பட நீரின்
நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே”

நோய்நாடல் நோய் முதல் நாடல் (1ம் பாகம்)

Neerkuri,

“வந்தநீர்க் கரிஎடை மணம் நுரை எஞ்சலென்
றைந்திய லுளவை யறைகுது முறையே”

Urine is examined for the following neerkuri:

- நிறம் - Colour
- எடை - Specific Gravity
- மணம் - Smell
- நுரை - Frothy nature
- எஞ்சல் - Quantity of urine voided

NEIKURI:

Neikuri is an important test to assess the predominantly affected humour. Early morning urine of the patient is collected in a glass container and examined within 1 ½ hrs. A drop of gingelly oil is dropped and kept in the sunlight at a calm place. The nature of the oil drop in the urine is noted.

If the oil drop,

1. Spreads like a snake, it indicates vatha disease
2. Spreads like a ring, it indicates pitha disease
3. Appears like a pearl, it indicates kaba disease

In Vathakarappan, the pearl like condition were seen, which is the character of the Kaba neer.

பிற பரிசோதனை முறைகள்: (Other Diagnostic Parameters)

1. உயிர்த்தாதுக்கள்
2. ஏழு உடற்கட்டுகள்
3. பருவகாலம்
4. ஞானேந்திரியம்
5. உடல் வன்மை

MUKKUTRAM

Vatham- Vatham is the kinetic energy of all movements.

Vatham	Functions	Affected
Pranan	Responsible for breathing and respiration	Affected.
Abanan	Responsible for passing urine, stools, sperms, menstrual flow, ova and foetus etc.	Constipation, Burning or scanty micturition.
Samanan	For proper digestion	Affected due to other vayus
Viyanan	Movements of all parts of the body	Affected.
Udhanan	Responsible for vomiting, cough and nausea	Not affected.
Nagan	Responsible for opening and closing of the eye	Not affected
Koorman	Responsible for vision and yawning	Not affected
Kirukaran	Responsible for salivation, nasal secretion and appetite	Not affected
Thevathathan	Responsible for laziness, sleeping and anger	Insomnia
Dhanjeyan	Produce bloating of a body after death.	Not affected

In the case of Vatha Karappan, Pranan, Abanan, Samanan, Viyanan, and Dhevathathan are affected.

Pitham- Responsible for all transformation

Pitham	Functions	Affected
Anal pitham	Gives appetite and helps digestion	Indigestion, constipation, loss of appetite
Ranjaga pitham	Responsible for the colour of blood	Eosinophilia, raised ESR, erythema, boil, ulcer, oozing, anemia
Sathagam	Controls the whole body	Unable to do regular work properly due to intense itching
Prasagam	Gives complexion to skin	Dryness, roughness, hyper pigmentation & lichenification of the skin
Alosagam	For vision	Not affected

In the case of Vatha Karappan, Anal Pitham, Ranjagam, Sathagam and Prasagam are affected.

Kabham- Stabilizes, maintain and lubrication of all movements

Kabam	Functions	Affected
Avalambagam	Controls all other forms of kabam	Affected due to other kabam affected
Kilethagam	For digestion	Loss of appetite
Pothagam	Identifying taste	Not affected
Tharpagam	Coolness of the eyes	Not affected
Santhigam	Lubrication of the joints	Pain in the joints

In the case if Vatha Karappan, Avalambagam, Kilethagam and Santhigam are affected.

Udal Thathukkal

There are seven udal thathukkal in human body.

Saram	Strengthens the body and mind	Tiredness, roughness, dryness
Senneer	Preserves brightness, boldness Power and knowledge	Tiredness, dryness, anaemia, erythema.
Oon	Gives structure and shape to body. Responsible for movement	Erythema, vesicle, pustule, lichenification
Kozhuppu	Lubricate the organs and proceed on its own works	Ulcer, boil.
Enbu	Protects vital organs and used for movements nominates body structure.	Not Affected.
Moolai	It is present inside the bones and gives strength and maintains the normal condition of the bone	Not Affected.
Sukkilam or Suronitham	Meant for reproduction	Not Affected.

In the case of Vatha Karappan, Saaran, Senneer, Oon and Kozhupu are affected.

Paruva kaalam (Season)

In every season changes will occur in the land water, plants, animals, and human beings which will modify the physiology and makes them susceptible to certain diseases which are common in that season.

Kabam gets thannilai valarchi in Pin pani kaalam and vetrunilai valarchi in Elavenil kaalam. Pitham sets Thannilai valarchi in Kaar kalam and vetru nilai

valarchi in Koothir kaalam. Vatham sets Thannilai valarchi in Mudhuvenil kaalam and vetrunilai valarchi in kaar kaalam.

Gnanainthriyam

Mei	Touch sensation	Roughness, heat & burning sensation
Naa	Analyse taste	Not affected
Kan	For vision	Not affected
Mooku	For smell	Not affected
Sevi	For hearing	Not affected

Udal vanmai :(Body immunity)

Iyarkai vanmai: Natural immunity of the body itself by birth.

Seyarkai vanmai: Improving the health by intake of nutritious food materials, activities & medicines.

Kaala vanmai: Development of immunity according to age and the environment.

When udal vanmai is affected, there may be a possibility of Karappan.

முக்குற்ற வேறுபாடுகள்

“மிகினும் குறையினும் நோய் செய்யும் நூலோர்
வளி முதலா எண்ணிய மூன்று”

- திருக்குறள்

ஸ்தூல சரீரங்களாகிய சப்த தாதுக்களும் வளி, அழல், ஐயமாகிய முக்குற்றங்களும் தத்தம் இயற்கை தன்மையின்று வேறுபடும் நிலை நோய் எனப்படும். உணவு முறை, பழக்கவழக்கங்கள், மற்றும் காலமாறுபாடுகளால், வாதம், பித்தம், கபம் மூன்று தாதுக்களும் தன்னிலை பிறழ்ந்து, நோயை உண்டாக்குகிறது.

வாத கரப்பான் நோயில் தன்வினை, பிறவினைகளின் பயனாகத் தூண்டப்பட்ட ஐயக்குற்றமானது, வளி அழல் ஆகிய குற்றங்ளை துணை கொண்டு குறி குணங்களை உண்டாக்குகிறது.

“வாதமலாது மேனி கெடாது”

-தேரையர்

மேற்கூறிய தேரையரின் கூற்றுப்படி தேகத்தின் ஒளி என்னும் அழகும், வன்மையும் கெடுவதற்கு முக்கியமான முதற்காரணம் வளிக்குற்றமாகும். “வாயுவின் கூறு வாதம். வாத தோடம் வன்மையடையும் போது கடினம், வறட்சி, இலேசு, குளிர்ச்சி, அசைத்தல், அணுத்துவம் ஆகிய ஆறு குணங்கள் உண்டாகின்றன. மேற்கூறிய குணங்கள் தோலில் காணப்படுகின்றன.

The changes in the mukkutram form the basis of the pathology of a disease. The changes in the mukkutram may be either in terms of quantity increased or decreased kutram due to their quality, character, function, and type. In Vatha karappan, there is increase in the vatha kutram and kaba kutram.

Functions of Vatham:

Body pain, redness and roughness of skin, tastelessness, sweating, sleep, constipation, oliguria, blackish discolouration of skin, urine, stool.

If Increased:

Weight loss, weakness, giddiness, constipation, insomnia, abdominal distension, blackish discolouration.

If Decreased:

Body pain, feeble voice, syncope, diminished

Functions of Kabam

White complexion, dullness, itching, loss of sensation, heaviness, indigestion.

If increased:

White complexion, loss of appetite, excessive salivation, diminished action, excessive sleep, cough,

If decreased:

Giddiness, dryness of the joints, excessive sweating, palpitation,

Udal thathu verupadugal:

Udal thathu	Increased features	Decreased features
Saaram	Loss of appetite, diminished activity, excessive salivation, sleep, cough.	Dryness of the skin, loss of weight, tiredness, diminished activity.
Senneer	Boils in all parts, tumors, loss of appetite, jaundice, and splenomegaly.	Tiredness, anemia, dryness.
Oon	Tumors around the neck, face, abdomen and thigh.	Muscle wasting, tiredness.
Kozhuppu	Increased features of oon, and dyspnoea.	Splenomegaly, weight loss.

In Vatha karappan, the Saaram, Senneer, Oon and Kozhuppu are affected due to decreased features.

NOI KANIPPU VIVADHAM

பித்த கரப்பான்

“தானாகக் கண்தூங்கி நடுவு உந்தி
தளர்ந்துமே உட்காந்து வெதுப்புண்டாம்
தூனாக் கிறுகிறுக்கு முடலாஞ் சோரும்
சொரிந்துமே உடம்பு மஞ்சளிக்கும்
வேணாக வண்ணத்தை இறங்கொட்டாது
மிடுக்கான தீபமந் தித்துப் போகும்
பேனாக ஊருவது போலக் காணும்
பித்த கரப்பான் குணத்தின் வெற்றியாமே”

- Drowsiness.
- Itching over the affected area.
- Yellow discolouration of the skin.
- Difficulty in swallowing.
- Loss of appetite.
- Lethargy and subjective vertigo.

சேத்துமக் கரப்பான்

“பெற்றியாய்ச் சரீரமது வெளறிக் காணும்
பேச்சுத்ததான் கம்மலாய் தானிருக்கும்
புதிதாய் வார்த்தையது பொறுக்கிச் சொல்லும்
பிரபலந்தான் மிகப்பேசி மூச்சுண்டாகும்
எத்தியாய்ச் சகலரையுமேவல் கொள்ளும்
ஈளையிருமல் மூச்சுக் காதிரைச்சல்
முத்தியாய் மோட்ச வழி முறையாகும்
முதிர் சேட்பக் கரப்பானின் மூர்க்கந்தானே”

- Pale discoloration of the skin.
- Hoarseness of voice, commanding others.

- Cough.
- Tinnitus in the ear.

கபால கரப்பான் :

“காணவே காதெல்லாம் தினவுண்டாகும்
கண் தினவாம் கண்டந்தான் கரகரக்கும்
பூணவே கண்ணிரும் பீளையுண்டாம்
பேச்சுமந்த மூக்கதனில் நீரேபாயும்
தோணவே சிரசுதனிற் சொரிதலுண்டாற்
தும்மல் மிகவுண்டாகுந் துடிக்கும் நெற்றி
ஆணவே அண்ணாக்கி ழலுண்டாகும்
அழங்காத கபால கரப்பான்றன் குணமாமே”

- Itching over the ear lobes and eye lids.
- Excessive lacrimal secretion and plenorrhoea.
- Running nose and sneezing.
- Pain in the throat.
- Itching over the head.

கண்டக் கரப்பான்:

“தளிராகச் சிரமெங்கு மிகக் கனத்துத்
தலைகாது மண்டையெல்லாந் தடித்து நோகும்
நளிராக வருத்தி விக்கும் நாத்தடிக்கும்
நலமான உடம்புதனிற் சொரியுமாகும்
குளிராகக் குளிர்ந்துமே மயிர்க்கூச்சாகும்
கூப்பிட்டால் மிகப்பயகம் கூசங்கண்தான்
களிராக முட்போலக் கண்டந்தன்னில்
கரகரக்கும் கண்டமாங் கரப்பனாமே”

- Headache
- Swelling and pain in the head and ear

- Hiccup and swollen tongue
- Itching all over the body
- Chillness with shivering
- Glittering of vision
- Roughness in the body

வறட்சிக் கரப்பான்

“கண்டாய் மிகவீங்கும் குத்தலுண்டாம்
கனமாக உடம்பெங்கும் மிகவே ஊறும்
துண்டமாயுடல் பதைத்துச் சொறிதலுண்டாகும்
சோருமே யெந்நேரம் மயக்கத்தாலே
வண்டகந்தானில்லாம லுடம்பு வற்றும்
மாறுபாடாய்ப் பிதற்றி மறுகும் வார்தை
பிண்டமாக்கி டந்துண்டு புலாலே நாறும்
பெருவறட்சி கரப்பான்தன் பேரிதாமே”

- Puffiness of face with deep seating pain.
- Swelling and pain over the affected area.
- Itching all over the body.
- Disoriented words, Foul smell in the body.

திமிர்வாதக் கரப்பான்

“வண்மையா யுட்கார்ந்து எழும்பும் போது
வருத்தமாய் கால்கைகளி லிடுப்புச் சந்து
திண்மையாய்த் திமிர்த்துமே கரடு கட்டும்
செயலழிந்து வீங்கிய வெடித்துப் புண்ணாகும்
தண்மையாய் சடமெங்கு முதலாகும்
தண்ணீர்தான் மிகத்தடத்துத் தனிச் சூடுண்டாம்
உண்மையாய் மேனியெங்கும் உளைச் சலுண்டாம்
உதறுமே திமிர்வாதக் கரப்பானுமே”

- Pain in the knee, elbow, wrist, hip, shoulder and fingers during sitting and standing.
- Swelling of the joints which burst to form ulcers.
- Pain all over the body, lethargy.

Prognosis of Karappan (சாத்தியம்-அசாத்தியம்)

“மூர்க்கமாம் சாத்தியத்தை மொழியக் கேளாய்
 மொழிகின்ற வாத கரப்பான் றன்னோடு
 ஊர்க்கமாய் பித்த கரப்பானுமாகும்
 உயர்கின்ற வறட்சியாங் கபாலக் கரப்பான்
 தர்க்கமா யிதுநாலுஞ் சாத்தியமாம்
 தளுக்கான திமிர்வாதக் கரப்பான் கண்டம்
 நீர்க்கமாஞ் சேட்ப கரப்பான்றன் னோடு
 செப்பியதோர் இது மூன்றும் அசாத்தியமாமே”

-யூகி வைத்திய சிந்தாமணி

சாத்தியம்

1. வாத கரப்பான்
2. பித்த கரப்பான்
3. வறட்சி கரப்பான்
4. கபால கரப்பான்

அசாத்தியம்

1. திமிர்வாத கரப்பான்
2. கண்ட கரப்பான்
3. சேத்தும கரப்பான்

மருத்துவ வழிமுறை (Line of Treatment):

Apart from treating the disease with medicines, Siddhars have emphasized the two main parts of disease by prevention and improving the body condition.

This is stated as follows.

❖ காப்பு	-	(Prevention)
❖ நீக்கம்	-	(Treatment)
❖ நிறைவு	-	(Restoration)

காப்பு (Prevention):

நோயினின்று உடலினைக் காக்க சித்தர்கள் கூறிய நாள் ஒழுக்கம், கால ஒழுக்கம், பிணியணுகா விதிகளை கடைபிடிக்க அறிவுறுத்த வேண்டும். கோபம், துக்கம், மன அழுத்தம் இவற்றிலிருந்து விடுபட மூச்சுப்பியிற்சி, ஆசனங்கள் செய்ய அறிவுறுத்த வேண்டும்.

வாத, பித்த, கப தேகிகளுக்குத் தக்கவாறு உணவுவகைகளை சாப்பிட அறிவுறுத்த வேண்டும்

NEEKAM (TREATMENT):

1. To bring the three Dhosas in equilibrium initially Purgation is given
2. Treatment of diseases by internal medicine & external applications
3. Diet & Advices
4. Yoga Therapy

Since siddha system of medicine is based on the Mukkutra theory, the treatment is mainly aimed to bring down the three doshas to its equilibrium state and there by restoring the physiological condition by three thathus.

Purgative:

“விரேசனத்தால் வாதம் தாழும்”

So all the patients were advised to take 15 ml of vellai ennai with hot water (early morning) in empty stomach before treatment with trial drug.

Internal medicine:

Perumarapattai chooranam-1gm tds with water.

Reference: Agasthiyar 2000 third part Pg.no 73

External medicine:

Pungu thylum externally

Reference: Yugi Muni Vaithiya Kaaviyam Pg.no 299

Diet:

During the course of treatment, according to the drug administered to the patient and nature of the disease, the patients were advised to follow certain precautions regarding diet and physical activities. This type of medical advice in siddha system of medicine is termed as 'pathiyam'.

- கரப்பான் நோயினை உண்டாக்கக் கூடியமற்றும் அதிகப்படுத்தக்கூடிய உணவு வகைகளான கொள், பாகல், கொய்யா, முட்டை, கத்தரி மாம்பழம், புளி, உப்பு, பயறு வகைகள், அகத்தி கீரை, பீர்க்கு, காட்டுப்பூசணி இவற்றுடன் கம்பு, வரகு, காரரிசி, வாழைக்காய், தடியங்காய் ஆகியவற்றை நீக்க வேண்டும்.
- எளிதில் சீரணிக்கும் உணவு வகைகளை எடுத்துக் கொள்ளல் நலம். மரக்கறி உணவு, பால் மற்றும் பால் பொருள்கள், சத்துள்ள உணவுகள் உட்கொள்ளலாம். மசாலா பொருள்கள்(Spicy Foods)மணப் பொருட்கள், போதைப் பொருட்கள், காரப் பொருட்கள் நீக்க வேண்டும்.

PRANAYAMA



Step 1



Step 2



Step 3

PADMASANAM



PUYANGASANAM



Yoga:

Skin is the reflex of mind and so we should treat not only the physical but also treat the mind and soul. Thereby they were advised to do yoga practice i.e. Pranayamam, Asanas like pathamasana, Sarvangasana and Poorana Savasanthi Asanam. These asanas relive patient's stress and strain and also cures the karappan disease.

Asanas or yogic exercise make the mind alert, improves concentration and help to maintain a buoyancy of spirit. They create a sound mind in a sound body-V.G.Rele.

பதுமாசனம்: (பதுமம் -தாமரை)

சமதளத்தில் சம்மணமிட்டு உட்கார்ந்து வலப்பாதத்தை இடத்தொடைமீதும் இடப்பாதத்தை வலத்தொடை மீதும் ஏற்றி இரண்டு கைகளையும் கோர்த்து மலர்ந்திருக்குமாறு இருத்தல் .

பதுமாசனம் செரிமான சக்தியுண்டாக்கும். உடல் நலமும் மனமகிழ்ச்சியும் ஏற்படுத்தும். முக்குற்றங்களும் தன்னிலைப்படும்.

புயங்காசனம் (புயங்கம் - பாம்பு)

கால்களை நீட்டி குப்புறப்படுத்து கைகளை ஊன்றி தலை, மார்பு, வயிற்றின் மேல்பகுதி வரை மேலே தூக்கி வைத்திருத்தல்.

நோய் எதிர்ப்பு சக்தியை அதிகப்படுத்தும்.



POORNA SHANTHI ASANAM

பூரண சவ சாந்தியாசனம்

மல்லாந்து படுத்து கால்களை நேராயும், கைகளை உடலோடு பக்கவாட்டிலும் வைத்து நேராய்ப் படுத்திருத்தல்.

இது களைப்பை போக்கி மனதுக்கு புத்துணர்ச்சி உண்டாக்கும்.

- சித்த மருத்துவம் சிறப்பு

நிறைவு (Restoration):

The patients needs good discussion, motivation and persuasion to accept the eventually of the disease and prepare for life style that provides a disease free life.

Preventive Methods:

- ❖ Avoid allergic and dust atmosphere.
- ❖ To find out which agent makes allergy and avoid them.

Modern Aspects

Vatha karappan

MODERN ASPECTS

SKIN ANATOMY

The skin is the largest organ of the body. The skin and its appendages (hair, nails, sweat and oil glands) make up the integumentary system. Among its many functions the skin is an incredible organ always protecting the body from external agents.

Our skin is built up of two main layers. Within these two layers there are a range of different skin cells, sub-layers, nerves, blood vessels, sweat and oil glands, hair follicles, collagen and elastin fibres. The structure of the 3 layers of skin - the epidermis, dermis, and subcutaneous tissue. .

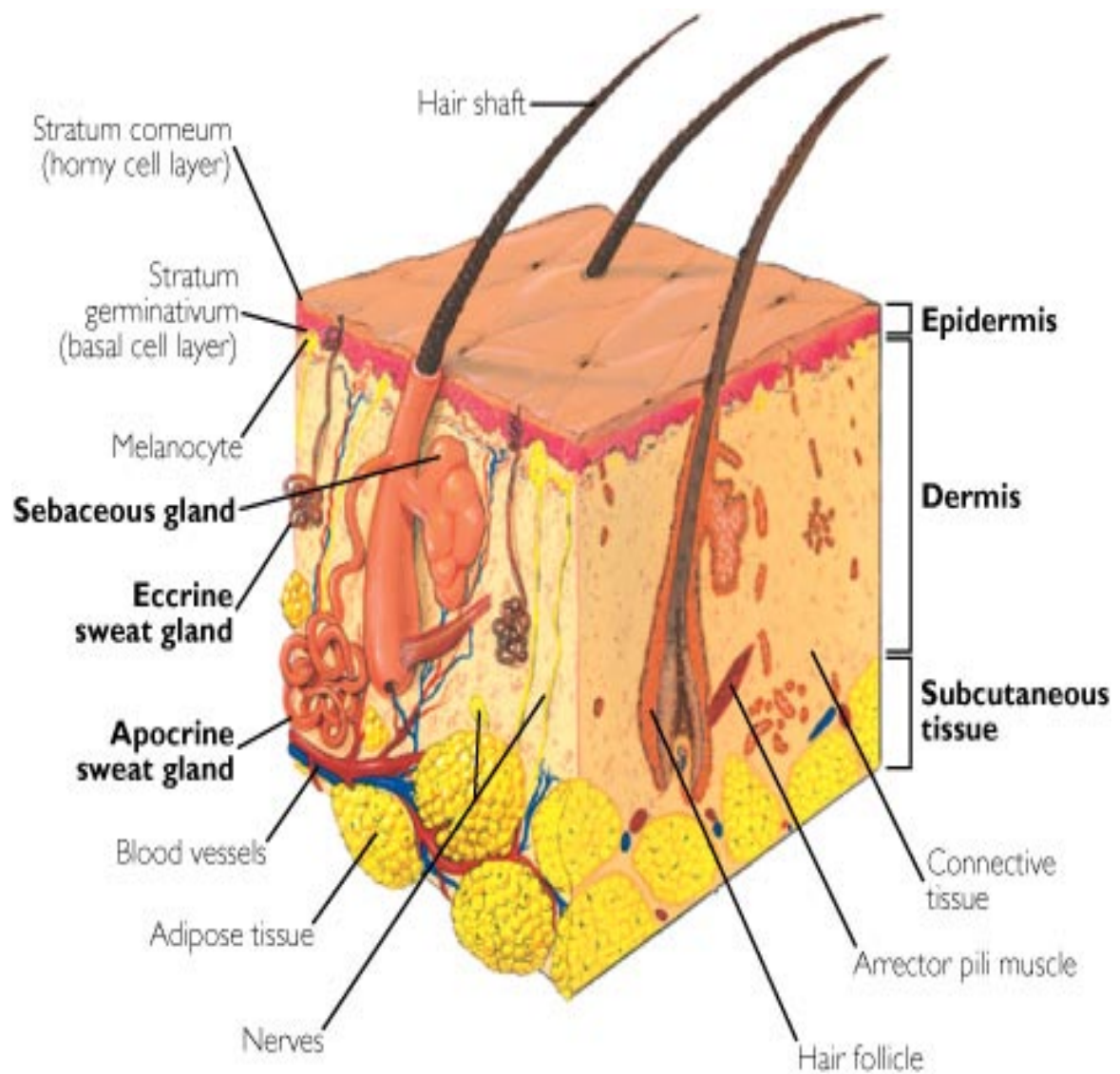
Epidermis

The epidermis is the outer layer of skin. It is the thinnest on the eyelids at .05 mm and the thickest on the palms and soles at 1.5 mm. The entire epidermis is replaced by new cell growth over a period of about 48 days.

The epidermis contains 5 layers. From bottom to top the layers are named,

1. Stratum germinativum:
 - Deepest portion of the epidermis. .
 - Melanocytes are found in this layer.
2. Stratum malpighii:
 - Superficial to the basal layer

SKIN ANATOMY



3. Stratum granulosum:

- Superficial to the stratum malphigii

4. Stratum lucidum:

- It is present only in the skin of the finger tips, palms and soles.

5. Stratum corneum (Corne-hard (or) hoof like)

- This is the most superficial layer, thickest on palms and soles..

Dermis

The dermis also varies in thickness depending on the location of the skin. It is 0.3 mm on the eyelid and 3.0 mm on the back. The types of tissue are:

- collagen
- elastic tissue
- reticular fibers

Layers of the Dermis

The two layers of the dermis are the papillary and reticular layers.

- The upper, papillary layer.
- The lower, reticular layer.

Subcutaneous tissue

The subcutaneous tissue is a layer of fat and connective tissue that houses larger blood vessels and nerves. The size of this layer varies throughout the body and from person to person.

Epidermal appendages like

- a. Pilosebaceous unit
- b. Sweat glands.

Pilosebaceous unit: It consists of a hair follicle and sebaceous glands opening into follicular canal of hair follicle.

Sebaceous gland:

- Lipid secreting holocrine glands.
- Distributed areas are scalp, face, and upper chest.
- Activated under the influence of androgen hormone.

Sweat glands

- Eccrine glands and apocrine glands

Eccrine glands

- They are abundant on the palms, soles, forehead, and margin of lips, glans penis and axillae.
- Over three million sweat units are present at birth.

Apocrine glands

- Occur in the axilla, areola and nipples of breasts, umbilicus, around the anus and genitalia.
- Their secretions are odoriferous with a secondary sexual significance.

Hair

- Hair is found on almost every part of the body surface except on the palms, soles. Hair grows at the rate of 0.3 mm per day.

Nail

- Nail is a continuously growing structure at a rate of 0.1mm per day.

PHYSIOLOGY

Function	Structure / cell involved
Protection against chemicals, particles ultraviolet radiation antigens, haptens microbes	Horny layer, melanocytes, langerhans cells, lymphocytes, mononuclear phagocytes, mast cells horny layer, langerhans cells, mononuclear phagocytes, mast cells.
Preservation of a balanced internal environment: Prevent loss of water, electrolytes and macromolecules	Horny layer
Shock absorber Strong, yet elastic and complaint covering	Dermis and subcutaneous fat
Sensation	Specialist nerve endings
Calorie reserve	Subcutaneous fat
Vitamin D synthesis	Keratinocytes
Temperature regulation	Blood vessels, eccrine sweat glands
Lubrication and waterproofing	Stratum corneum
Protection and prising	Nails
Hormonal Testosterone synthesis from inactive precursors and testosterone conversion to other androgenic steroids	Hair follicles, Sebaceous glands
Body odour (more important in animals)	Apocrine sweat glands
Psychosocial	Hair, nails, appearance and tactile quantity of skin.

ECZEMA- MODERN ASPECTS

Definition

Dermatitis and eczema is non contagious inflammation of the skin characterized by erythema, scaling, oedema, vesiculation and oozing.

Eczema has been used as a descriptive term since the sixth century.

Eczema is a Greek word (Ec-means “out”, zeo-means “boil”). The whole word implies “boil out”.

Aetiology:

Basically two factors causes dermatitis and eczema

- 1) Firstly , an allergic or a sensitive skin
- 2) Secondly, exposure to an irritant and some endogeneous substances.

The general predisposing factors are,

1. Age
2. Familial predisposition
3. Allergy
4. Debility
5. climate
6. Psychological factors
7. Xeroderma or Ichthyosis
8. A greasy skin
9. Hyperhidrosis
10. Varicose vein causing congestion and focus of lowered resistance.
11. Dysfunction of the intestinal tract
12. Toxins and infection

The Aggravating factors can be summarized as follows

1. Irritants - Physical, Chemical or electrical
2. Sensitizers - Medicaments, Occupational hazards, plants, cosmetics and clothing.
3. External infection- Streptococci, staphylococci, Fungus.
4. Mental and emotional conflicts, strains and stresses.
5. Internal septic focus shedding to or causing bacteraemia.
6. Diet and stage of digestion.
7. Diathesis - Allergic, Xerodermic, hyper-hydrotic (or) seborrhoeic.
8. Drugs given for the disease (or) there wise.
9. State of local (or) general nutrition.
10. Climate - temperature and humidity.

Some examples for Occupational hazards are as follows

- | | | |
|---------------------------|---|--|
| Agriculturists | - | Plants, weeds, fertilizers |
| Automobile | - | Oil, petrol, solvent, grease, paints |
| Building workers | - | Cement, lime, paints, insecticides, wood, kerosene, turpentine oil |
| Pharmaceutical industries | - | Dyes, Chemicals, explosives, Solvents, disinfectants, detergents |
| Coal miners | - | Mechanical injuries |
| Dentists | - | Cocaine and its derivaives |
| Engineering industries | - | Cutting oils, solvents |

Housewives	- Soaps, detergents, vegetables, fruits, nickel, polishes, artificial flavours
Nurses and Doctors	- Iodine, streptomycin, chlorpromazine, tincture, benzonin
Photographers	- Hardeners, solvents, glass, cellulose esters
Rubber workers	- Additives like TMT, MBT, dyes, glues, oils
Tannery workers	- Chromate, formaldehyde, arsenic, alkalies, acids.
Textile workers	- Formaldehyde, solvents, dyes.

GENERAL SYMPTOMS

- Redness of skin.
- Itching is an essential symptom in diagnosing eczema but not a specific one.
- Skin thickening of the affected area as compared to the unaffected region.
- Blisters that emerge on the affected part.
- Crusts – the secretions oozing from the inflamed region are rich in proteins.

On drying they form a crust on the skin.

CLINICAL FEATURES:

Acute eczema:

Characterised by intense pruritic papules and papulo vesicles, erythema with oozing and crusting.

Sub acute:

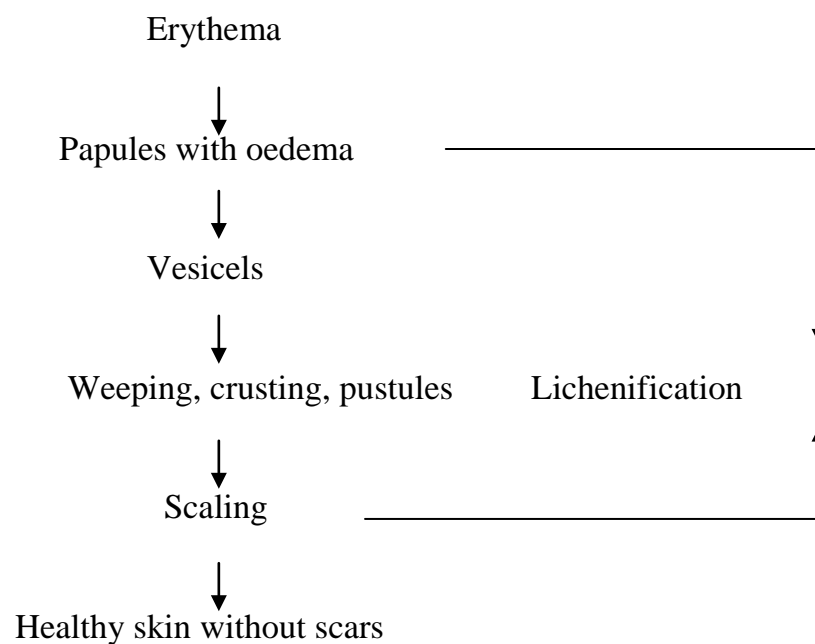
Characterised by scaling erythematous papules, with moderate erythema or oedema.

Chronic:

The above stages do not last long. In 2-3 weeks, the lesion starts to heal. If the cause persists, the eczema lasts for months or years and become chronic. In such cases, the skin becomes thickened and pigmented with lichenification.

The natural history of eczema is represented as follows

HISTORY OF ECZEMA



Immunology

Immunology is a science which deals with the body's response to antigenic challenge. This mechanism is involved in the protection of the body against infectious agents but periodically they can also cause damage.

Sensitization develops when a different clone of T-lymphocytes is activated. The sensitized T-lymphocytes yield two sub populations of lymphocytes.

1. Memory cells that is responsible for the persistence of contact allergy.
2. Effector cells that initiate the allergic response when appropriately challenged.

Reaction time:

It is the time taken by a sensitized individual to manifest a clinical reaction following contact with a known sensitizer.

It is usually 12-24 hours but may vary from one hour to 120 hours.

Dissemination reaction:

It is a fleeting erythematous macular reaction involving the face and flexures, caused by the escape of lymphokines in the circulation resulting in vasodilatation at distant site.

Flare reaction:

Flare reaction is reactivation of a previously healed site of a contact dermatitis or a positive patch test reaction following renewed challenge or exposure to the same allergen at another site. This is because of persistence of sensitized lymphocytes at the site of earlier reaction, which react to minute

amounts of antigen sometimes, escape in the circulation from the new site and find its way to the old site.

PATHO PHYSIOLOGY

Allergy & hypersensitivity:

Both terms are synonyms.

The concept of hypersensitivity was first introduced by Portier and Richet.

The term allergy was first used by Von Pirquit (1874 - 1929) to denote changed reactivity of the body to outside chemicals.

Changed reactivity in this context means that the body behaves in a particular way when it is exposed to a chemical substance known as 'Allergen' for this first time, but changes the nature of its reaction when it is exposed for the second and subsequent times. This change is due to proteins known as antibodies.

The moment, the allergen IgE combination stimulates the mast cells which unload their chemical contents into the surrounding tissues. These chemicals (mediators of allergy) cause the manifestations of allergy such as erythema, wheal and flare reaction. Flare is due to dilatation of arterioles by local axon reflex and the liberation of vasodilator substances like histamine and it's by products like serotonin, bradykinin, acetylcholine from the injured cells like mast cells and basophils etc. The manifestation of hypersensitivity may be immediate (or) delayed type.

Cutaneous Allergy

In the skin there are two important but different allergic reactions occur.

Dermal reaction:

- Dermal reaction is commonly seen in urticaria.
- The causative antigen reaches the skin through ingestion, inhalation or injection of protein substances and the reacting antibodies circulate in the serum.
- Allergic reaction takes place in the dermis
- Intra dermal tests (scratch) shows reactivity

Epidermal reaction:

- It is seen in allergic dermatitis or eczema.
- The causative substance reach the skin by contact, Intra dermal allergic tests are negative.
- But patch test shows reactivity
- Allergen + Epidermal protein – Antigen formation (probably in lymph glands)
- Circulation - Fixed in epidermal cells on next occasion
- Allergen + Antibodies – Eczematous reaction (In epidermis)
- A severe local reaction may result in auto-intoxication & dissemination of eczematous reaction to distant parts.

Status Eczematicus

It is believed that in case of severe allergic states, a state may develop when the patient becomes hypersensitive to even unrelated substances resulting in status eczematicus comparable to status asthmaticus in practice of internal medicine.

Further it must be realized that Dermal or epidermal sensitization affects the entire integument and this sensitization once acquired is life – long. According to some, a degree of bloating in reactivity may be seen with the passage of time.

HISTOLOPATHOLOGY:

- ❖ Formation of intercellular oedema (spongiosis) and vesicle formation.
- ❖ In chronic cases, hyperkeratosis, acanthosis, and infiltration of upper dermis with lymphocytes seen.

CLASSIFICATION

There are two groups of eczema.

Exogenous	Endogenous
Irritant	Atopic
Allergic	Seborrhoeic
Photodermatitis	Discoid
	Asteatotic
	Gravitational
	Neurodermatitis
	Infectious eczematoid

EXOGENEOUS ECZEMA:

Contact dermatitis:

Contact dermatitis is inflammation of the skin (rash) that may result when the skin is touched by chemicals or physical substances that cause an allergic or irritant reaction.

There are three types of contact dermatitis are,

1. Allergic contact dermatitis -- occurs when skin, which has become sensitized to a certain substance (allergens). This is a delayed skin reaction that typically develops 12 to 72 hours after exposure.
2. Irritant contact dermatitis -- occurs when the skin is exposed to a mild irritant (such as detergent or solvents) repeatedly or a strong irritant (such as acid, alkali, solvent, strong soap or detergent).
3. Photo contact dermatitis--PCD is the eczematous condition which is triggered by an interaction unharmed or less harmful substance on the skin and ultraviolet light (320-400 nm UVA).

Contact dermatitis symptoms can range from mild redness and dryness to severe pain and peeling that can be disabling, reddening of skin (either in patches or all over the body), intermittent dry, scaly patches of skin, blisters that ooze, burning or itching that is usually intense without visible skin sores (lesions), swelling in the eyes, face, and genital areas (severe cases) , hives, Sun sensitivity , darkened, "leathery," and cracked skin.

Endogeneous eczema:**Atopic eczema:**

Atopic dermatitis is an inflammatory chronically relapsing, non-contagious and pruritic skin disorder. The causes of the atopic eczema may be emotional-psychiatric, environment, allergic- Food, external contacts and inhalants, epidermal barrier system and histamine intolerance. Atopic dermatitis often occurs together with other atopic diseases like hay fever, asthma and allergic conjunctivitis. Hand and feet, and on the ankle, wrist, neck and upper chest are the common sites involved.

Atopic dermatitis is also known as infantile eczema, when it occurs in infants. Infantile eczema may continue into childhood and adolescence and it often involves an oozing, crusting rash mainly on the scalp and face, although it can occur anywhere on the body. The appearance of the rash tends to modify, becoming dryer in childhood and then scaly or thickened in adolescence while the itching is persistent. Red, inflamed, and itchy rash and develop into raised and painful bumps are the main clinical symptoms found.

Diagnostic criteria of atopic eczema includes Pruritus, Xerosis, History of asthma/ hay fever, Flexural folds, Early age of onset and Elevated serum IgE level.

Seborrhoeic Eczema:

This condition which is characterised by a red scaly rash affects the scalp (dandruff) central face, nasolabial folds, eyebrows and central chest.

It affects infants and adults and associated with increased sebum production of the scalp and sebaceous follicle. The main Causative factors are Genetic factors and hormonal factors

Nummular eczema (Discoid eczema):

Nummular (meaning "coin-shaped") dermatitis is characterized by pruritic, round-to-oval erythematous plaques found on the arms and legs, bilaterally symmetrical, worsen at night. Secondary infection (*Staphylococcus aureus*) may result in lesions that ooze serosanguineous exudate.

Lesions are often symmetrically distributed. The etiology is unknown and likely multifactorial.

Pompholyx (Dyshydrosis)

Pompholyx itchy is characterized by deep seated vesiculation on the palms and sides of the fingers and soles of the foot with bilaterally symmetrical. Provoking factors are heat, stress and nickel ingestion.

Aseptic eczema (winter eczema):

This is seen in elderly and those with atopic dermatitis or ichthyosis vulgaris. Lesion in limbs and trunks with erythematous, dry and itchy (Crazy paving pattern of fissuring) are seen.

Stasis Eczema:

It Occurs as a result of venous stasis on the lower portion of the legs. Eruption is brownish black pigmentation and secondary infection leads to ulceration and atrophic scarring. The cause is mainly due to perivascular fibrin deposition and abnormal small – vessel vaso constrictive reflexes.

Lichen simplex chronicus (Neurodermatitis)

Lichen simplex chronicus is characterised by lichenified plaque lesion or lesions due to repeated rubbing or scratching or due to stress. It is common among young people and menopausal women. The clinical features are the skin becomes thickened, infiltrated and pigmented with irregular margin. The common sites involved are ankles and wrists, nape of the neck, genitalia (Scrotum or mons pubis).

Infectious eczematoid dermatitis:

This results from sensitization to certain organisms like streptococci, staphylococci, dermatophytes and yeast organisms. The common sites are body folds, and hair follicles. The clinical features are well defined margin, erythema, vesiculation, profuse exudates, crusting, creasy, moist scales are appeared, small pustules at the advancing edge and pruritis present.

INVESTIGATION:

Investigation of Eczema

Patch test

Patch test detect type IV (delayed or cell-mediated) hypersensitivity.

The sites are then examined for a positive reaction 24 hours later and possibly again a further 24 hours later. The positive test is revealed by the development of an eczematous patch with erythema swelling and vesicles at the site of application.

Patch test reaction is graded in the following degrees

+	-	Only redness
++	-	Marked redness and swelling
+++	-	Marked redness, swelling and papules
++++	-	redness, oedema and vesicles

Specific IgE

Specific IgE levels to antigens can be measured in serum by a specific radio allergic sorbent test (RAST).

These are occasionally performed to support diagnosis of atopic eczema and to determine specific environmental allergens, eg. pet dander, horse hair, house dust mite, pollens and foods.

Prick test

Prick test are a way of detecting cutaneous type I (immediate) hypersensitivity to various antigens such as pollen, house dust, mite or dander.

Bacterial and viral swabs for microscopy and culture

These are useful tests in suspected secondary infection skin swabs for bacteriological assessment will invariably reveal the presence of bacteria. In the case of recurrent impetigo in a child with atopic eczema, bacterial swabs should be taken from carrier sites (axilla and groin) from both the affected individual and house hold members.

Hints of diagnosis for all eczemas

1. Nature of the lesions- size, shape, itching, number of papules, pustules, erythema etc.
2. Distribution – sites of lesion.
3. History of occupation.
4. History of exposure to allergens – i.e. Chemicals, plants, soap, etc.,
5. Personal and family History of such diseases – e.g atopic or allergic eczemas.
6. Climate – eg: Dyshidrosis occurs at the change of seasons particularly in spring, summer.
7. Patch tests (allergy test) in allergic/ atopic eczemas.
8. Biopsy in rare cases when the lesions do not respond to treatment.

General lines of managements

1. Explanation and reassuring the patient.
2. Psychotherapy – counseling and antidepressants mild sedatives learn to live with it, anger, frustration avoided.
3. Correcting or eliminating the etiological factors.
4. Exposure to sunlight or extremes of climate to be avoided, change of place or A/C advised.
5. Scratching and rubbing to be avoided, the nails to be cut short.
6. The health of the patients is improved by multivitamins, iron, protein.
7. Be aware of any foods that may cause an outbreak and avoid those foods

8. Avoid harsh soaps, detergents, and solvents
9. Avoid environmental factors that trigger allergies pollens, molds, mites, and animal dander.
10. Protection of the affected part with cotton bandage, glove and mask.
11. Rest
12. Protect the skin from irritants.
13. Reduce stress with relaxation techniques.

Differential diagnosis:

Psoriasis: Patches of erythema with silvery, typical distribution, little oozing, pin point bleeding and scaling.

Pitriasis rosea: Herald patch, medallion like lesions on back with pointing towards the centre, distribution along the ribs.

Tinea corporis: Well-defined macules, inflammatory border and central clearing, marked central clearing, marked itching.

Materials and Methods

Vatha karappan

MATERIALS AND METHODS

The study on clinical evaluation of the disease Vatha Karappan was carried out in the Post-Graduate Sirappu Maruthuvam department at Government Siddha Medical College, Palayamkottai. Twenty patients were selected for the study and admitted in the post-graduate Sirappu Maruthuvam ward. After discharge of these in-patients, all of them were followed as out-patients in the outpatient department.

Selection of Patients:

For this clinical study, 40 cases were selected from both sexes of varying age groups. All the cases were carefully examined before admission for correct diagnosis and rule out any other co-existing illness.

Study of Siddha clinical diagnosis:

The author prepared a case sheet on the basis of Siddha methodology (ie) poriyal arithal, pulanal theruthal, vinathal, envagai thervugal, ezhu udarkattugal, thinai, paruva kaalam and modern methodology to diagnose the disease. The individual case sheet was maintained for each and every patient.

Evaluation of clinical parameters:

During admission, the detailed clinical history was taken from the patients. The cardinal signs and symptoms of eczema like itching, vesicles, oozing, pain, oedema, crusting scaling and ulcers were also taken as criteria for the Vatha karappan cases. A detailed clinical history was taken by regarding the history of present and past illness, family history, aggravating factors, occupation, socio-economic status, dietary and personal habits and associated history such as bronchial asthma and hay fever.

Clinical Investigations:

The modern diagnostic investigations such as Blood tests for TC, DC, ESR, HB, sugar, urea, serum cholesterol, urine analysis for sugar, albumin deposits and skin scrapping tests for fungus, stool examination, cyst to rule out any systemic illness.

Efficacy of the trial drugs was found by biochemical analysis, carried out in the Department of the Bio-Chemistry, Government Siddha Medical College, Palayamkottai.

Pharmacological analysis of the trial drug was carried out in the Department of Pharmacology, Government Siddha Medical College, Palayamkottai.

Management:

“Viresanathal vatham thazhum” as per the Siddha aspect of this world, the author has selected the drug name Vellai ennai which is one among the purgatives in Siddha system.

All the patients were advised to take 10 ml of vellai ennai with hot water early morning in empty stomach before treated with trial drug.

Trial drugs

- Perumarapattai Chooranam-1gm 3 times a day with honey or water.
- Pungu thylam- Applied externally over the affected areas.

Results and Observations

Vatha karappan

OBSERVATIONS AND RESULTS

Results were observed with respect to the following

- Sex Reference
- Age Reference
- Kaalam distribution (life span)
- Occupational status
- Socio economic status
- Diet reference
- Seasonal Reference
- Thina Reference
- Gunam Reference(Characteres)
- Mode of Onset
- Aetiological reference
- Clinical reference
- Associated history
- Incidence of upper and lower limbs
- Duration of the illness
- Distribution of Uyir Thathukual
- Ezhu (Seven) udar Kattugal reference
- Envagai thervugal
- Neerkuri and Neikuri reference
- Results after treatment

Table 1

SEX REFERENCE

S. No.	Sex	No. of Cases	Percentage
1.	Male	26	65
2.	Female	14	35

Out of total 40 patients, who were taking medicine in OP and admitted in the hospital for the trial, 26 were males (65%) and 14 were females (35%).

SEX REFERENCE

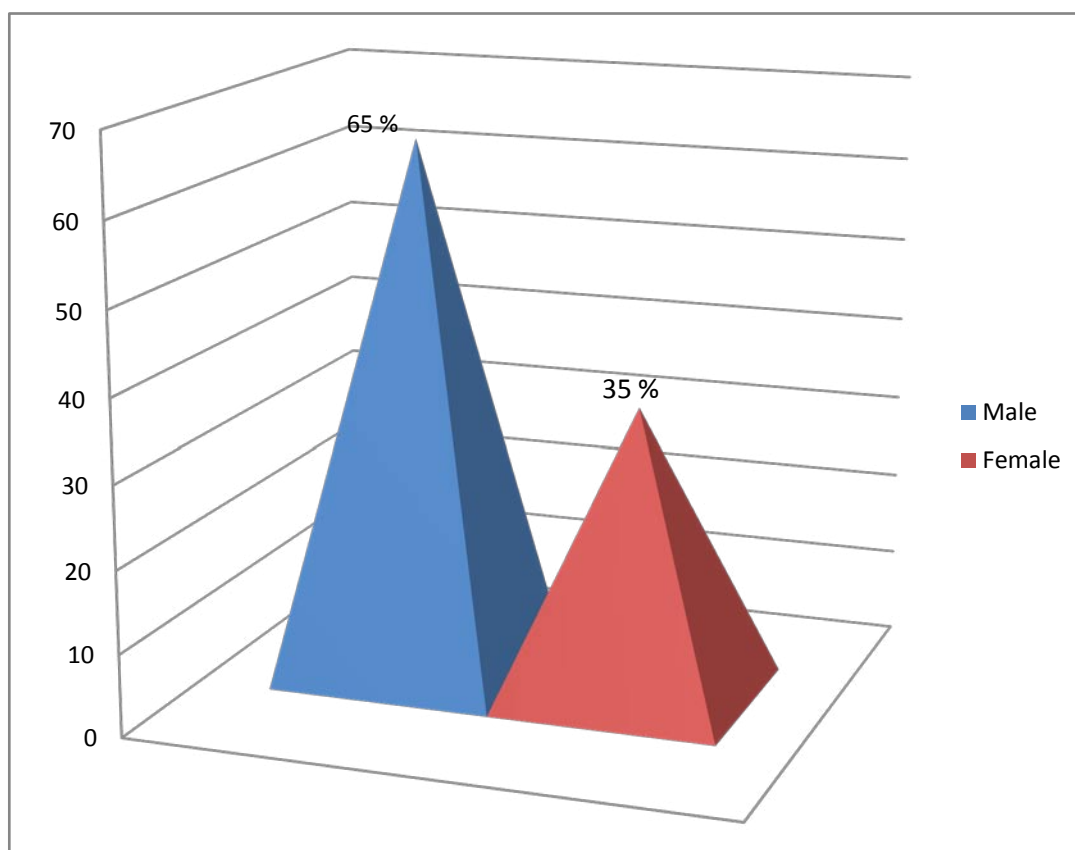


Table 2

AGE REFERENCE

Out of 40 cases selected for clinical trial, most of them were age above 50.

S.No.	Age	No. of cases	Percentage
1.	10-20	-	-
2.	21-30	2	5
3.	31-40	2	5
4.	41-50	4	10
5.	51-60	11	27.5
6.	61-70	12	30
7.	71-80	9	22.5

AGE REFERENCE

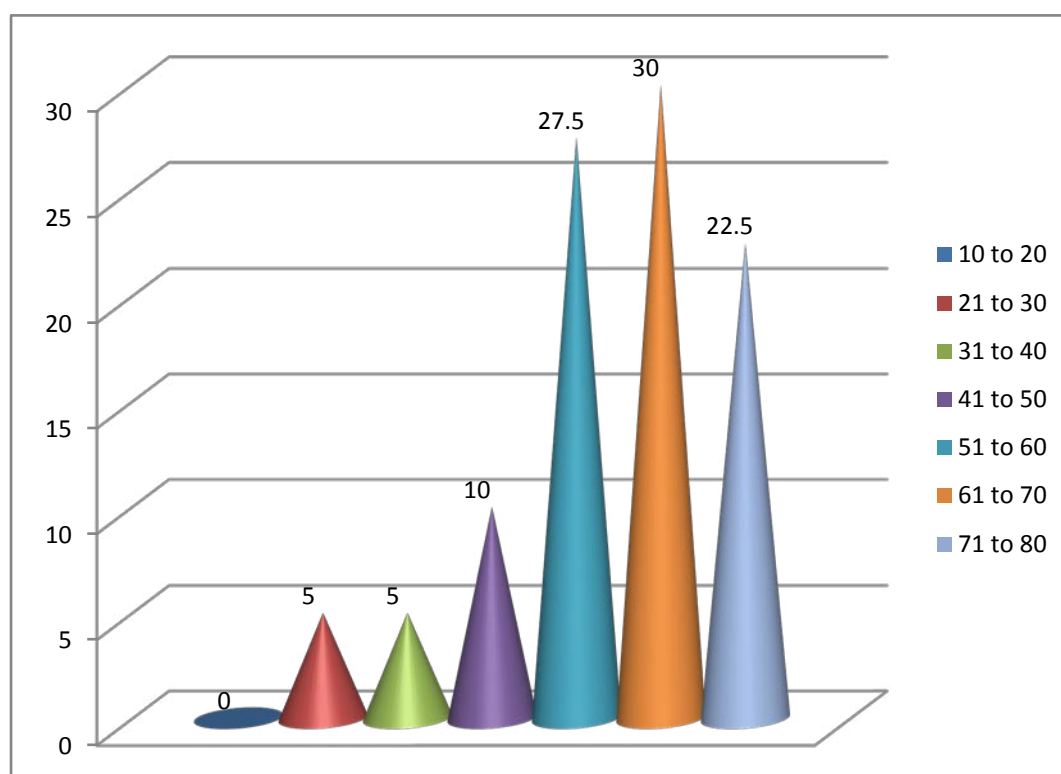


Table 3

KAALAM DISTRIBUTION

Different age groups were treated out of 40 the cases, most of them were in the Pitha kaalam, next in the Kaba kaalam but very less in Vatha kaalam.

S. No.	Kaalam	No. of Cases	Percentage
1.	Vatha kaalam(0-33)	4	10
2.	Pitha kaalam(34-66)	30	75
3.	Kaba kaalam(67-100)	6	15

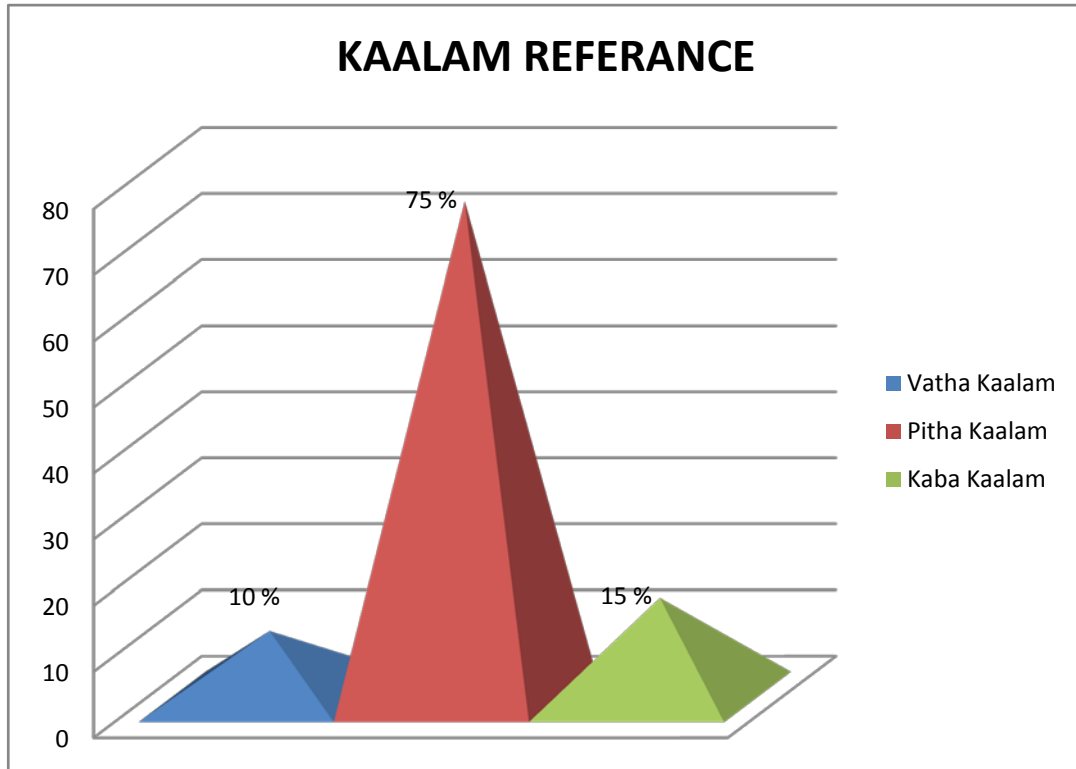


Table 4

OCCUPATIONAL STATUS

Occupational history is closely associated with Vatha karappan disease. Detailed history about the nature of the work has interrogated and illustrated as follows.

S. No.	Nature of status	No. of Cases	Percentage
1.	Farmers	16	40
2.	Coolies	14	35
3.	General merchant	2	5
4.	House wives	4	10
5.	Student	2	5
6.	Painter	1	2.5
7.	Tailor	1	2.5

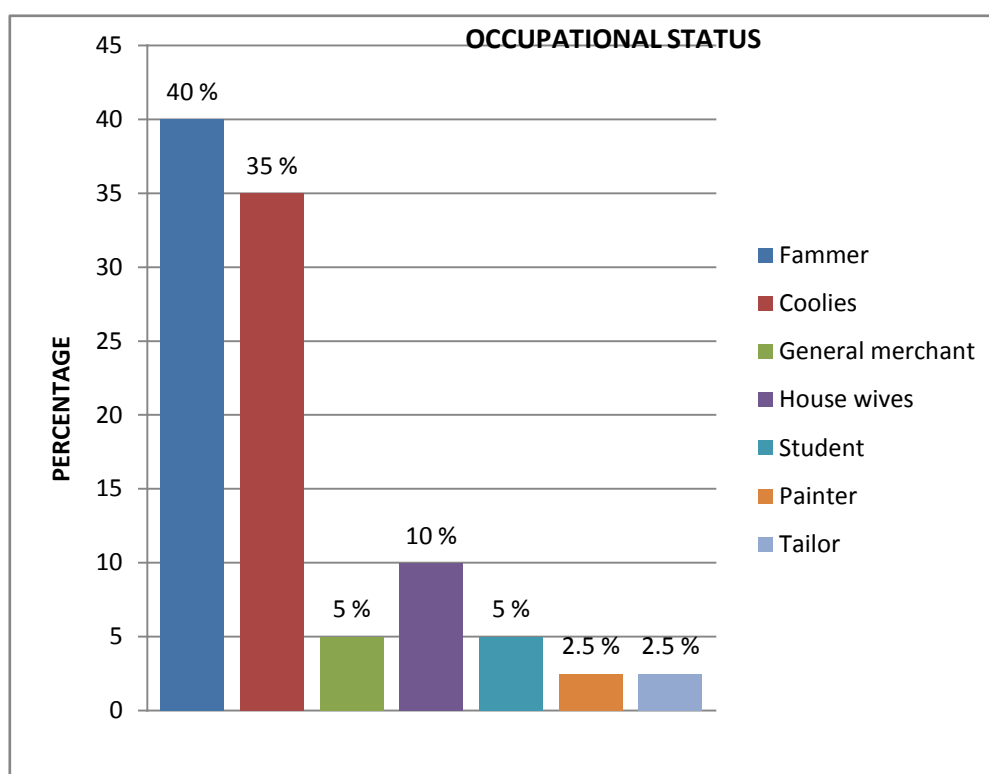


Table 5

SOCIO ECONOMIC STATUS

The incidence of the disease was found to be higher in lower economic groups.

S. No.	Socio economic status	No. of Cases	Percentage
1.	Poor	32	80
2.	Middle	8	15
3.	Rich	-	-

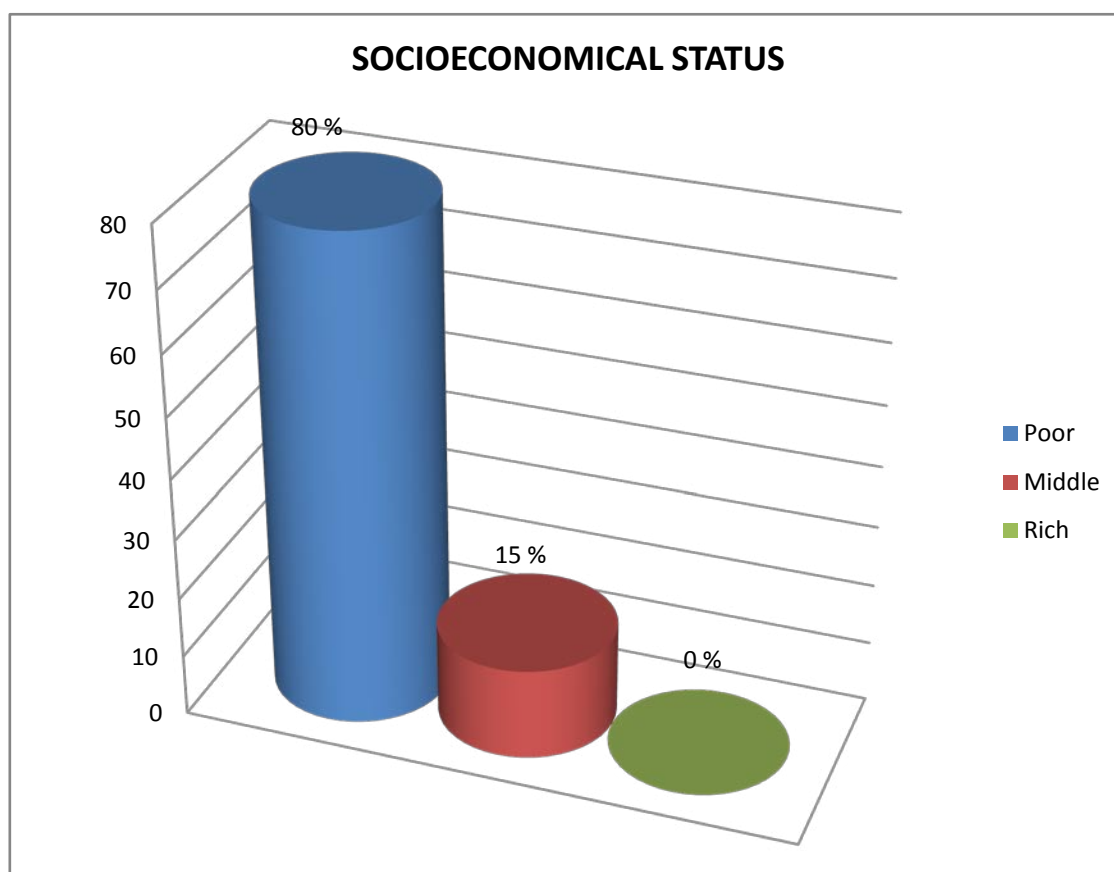


Table 6

DIET REFERENCE

Cases were enquired of their dietary habits, it was noted that 87.5% cases were non-vegetarian and 12.5 % were vegetarian.

S.No.	Food Habit	No. of cases	Percentage
1.	Vegetarian	5	12.5
2.	Mixed diet	35	87.5

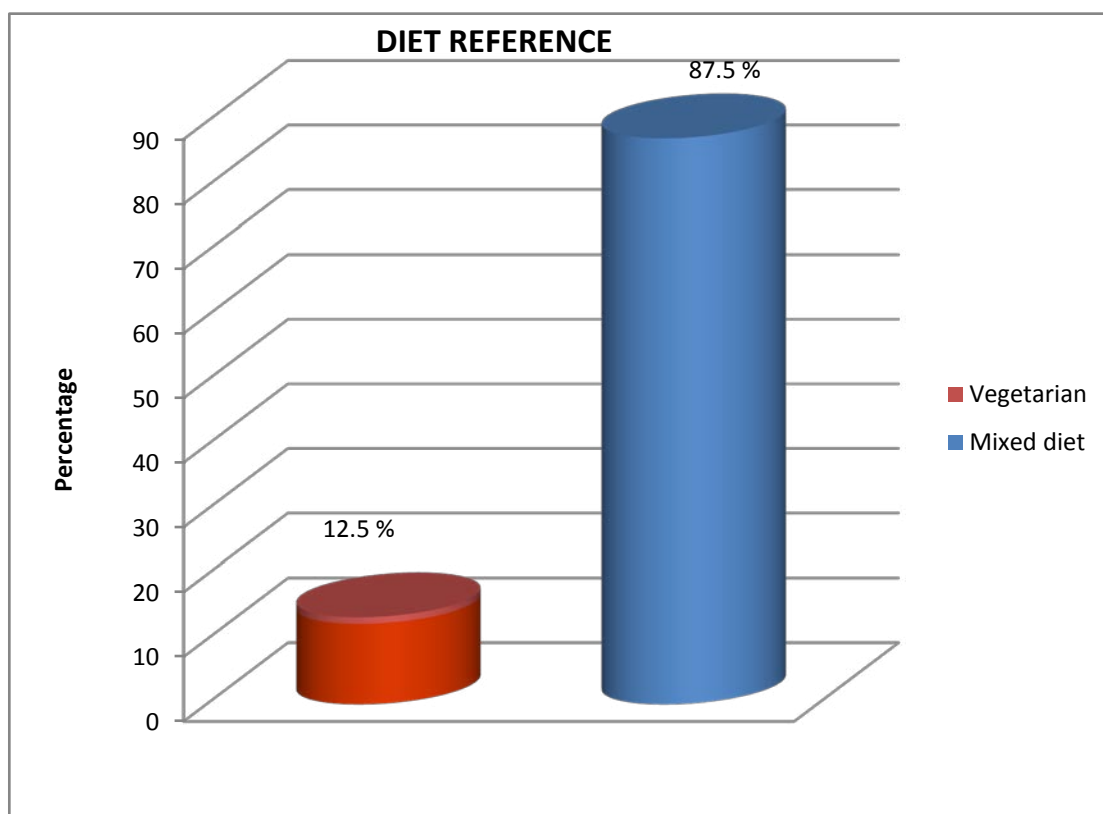


Table 7

SEASONAL REFERENCE

When these 40 cases were enquired with that of the seasonal link, with occurrence and severity of this disease, it mostly occurred in Munpani kaalam, Pinpani kaalam, Elavenil kaalam, and Mudhuvenil kaalam.

S.No.	Paruvakaalam	No. of Cases	Percentage
1.	Kaar kaalam	-	-
2.	Koothir kaalam	-	-
3.	Munpani kaalam	8	20
4.	Pinpani kaalam	18	45
5.	Elavenil kaalam	6	15
6.	Muthuvenil	8	20

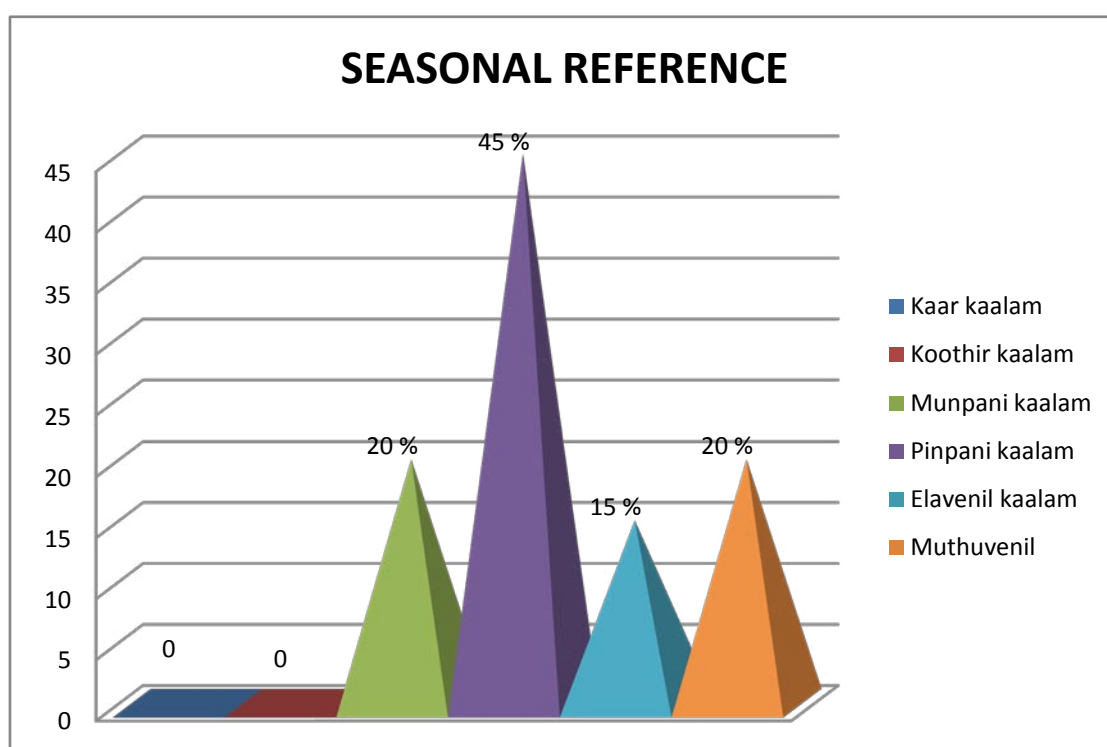


Table 8

THINAI REFERENCE

Out of the 40 cases, 37 cases are from Marutham (92.5%) and 3 cases from Neithal (7.5%).

S.No.	Type of lands	No. of Cases	Percentage
1.	Kurinji	-	-
2.	Mullai	-	-
3.	Marutham	37	92.5
4.	Neithal	3	7.5
5.	Palai	-	-

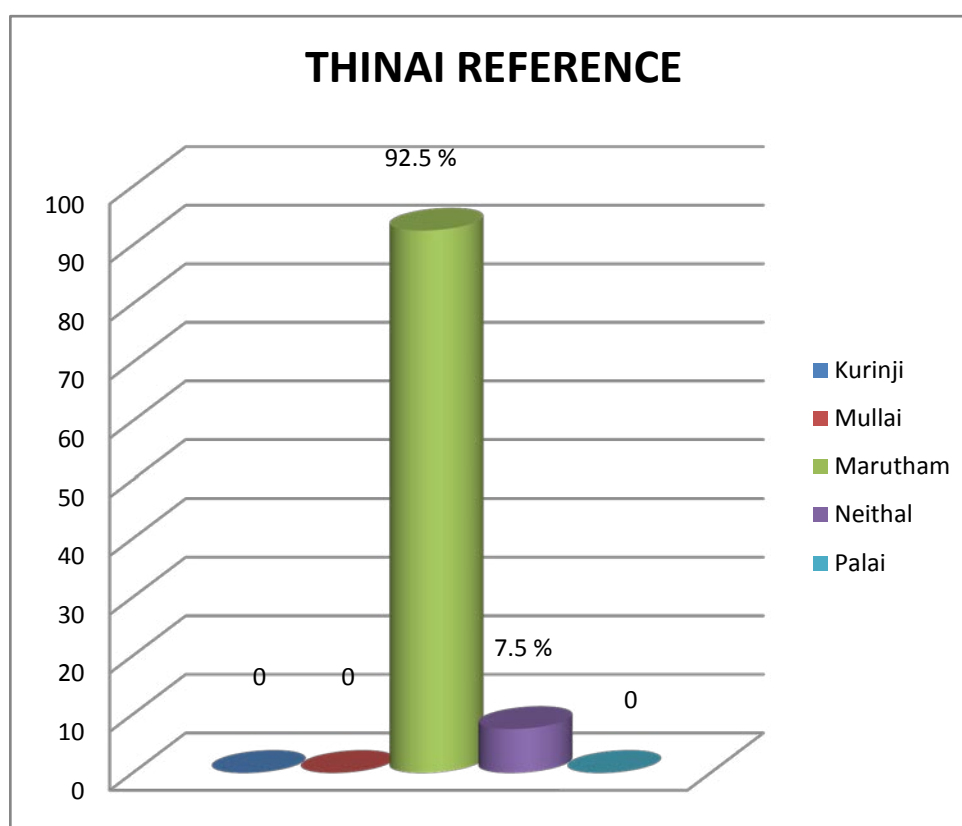


Table 9

GUNAM REFERENCE

Out of 40 cases 80% had Rajo gunam and 20% cases had Thamo gunam respectively.

S.No.	Type of gunam	No. of cases	Percentage
1.	Sathuva gunam	-	-
2.	Rajo gunam	32	80
3.	Thamo gunam	8	20

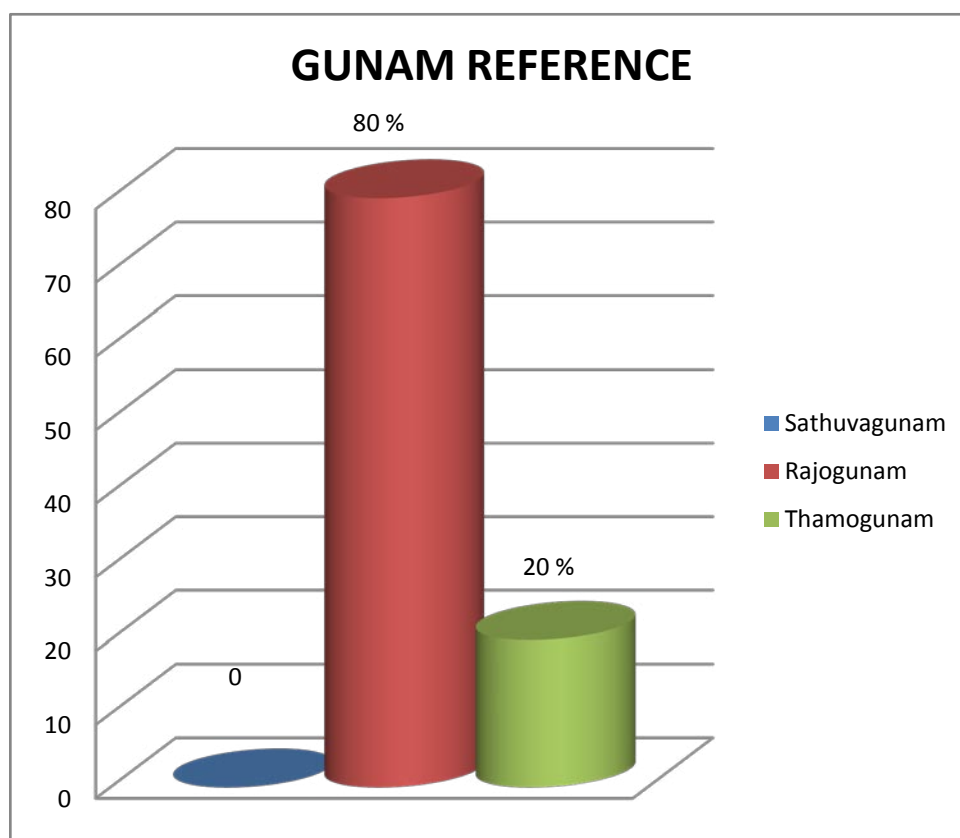


Table 10

MODE OF ONSET

Out of 40 cases of clinical trials were 70% were found to be chronic sufferers.

S.No.	Mode of onset	No. of cases	Percentage
1.	Acute	6	15
2.	Sub acute	6	15
3.	Chronic	28	70

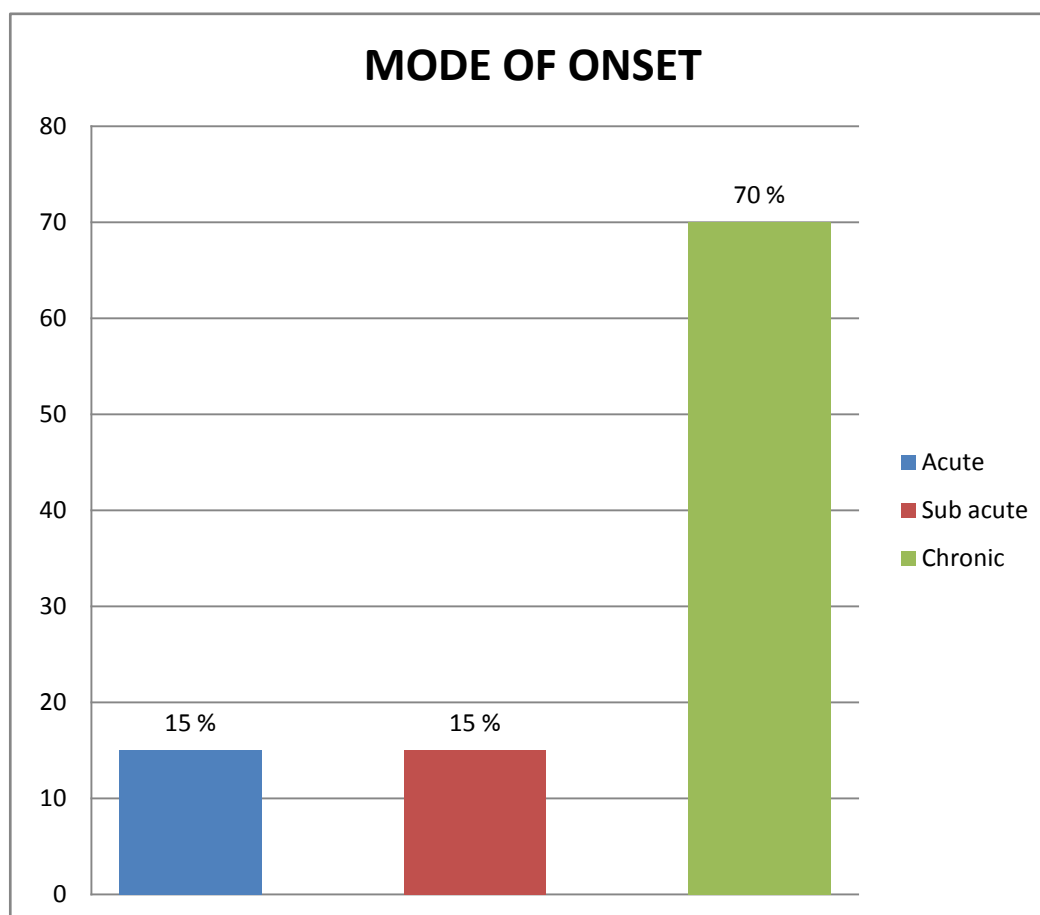


Table 11

AETIOLOGY

When the 40 cases taken for the study were observed were due to occupational status, poor hygiene, incompatible diet, anxiety, family history, insect bite and irritants or allergens.

S.No.	Aetiology	No. of cases	Percentage
1	Occupational status	19	47.5
2	Incompatible diet	3	7.5
3	Positive family history	3	7.5
4	Insect bite	5	12.5
5	Irritants or allergens	8	20
6	Psychological stress	2	5

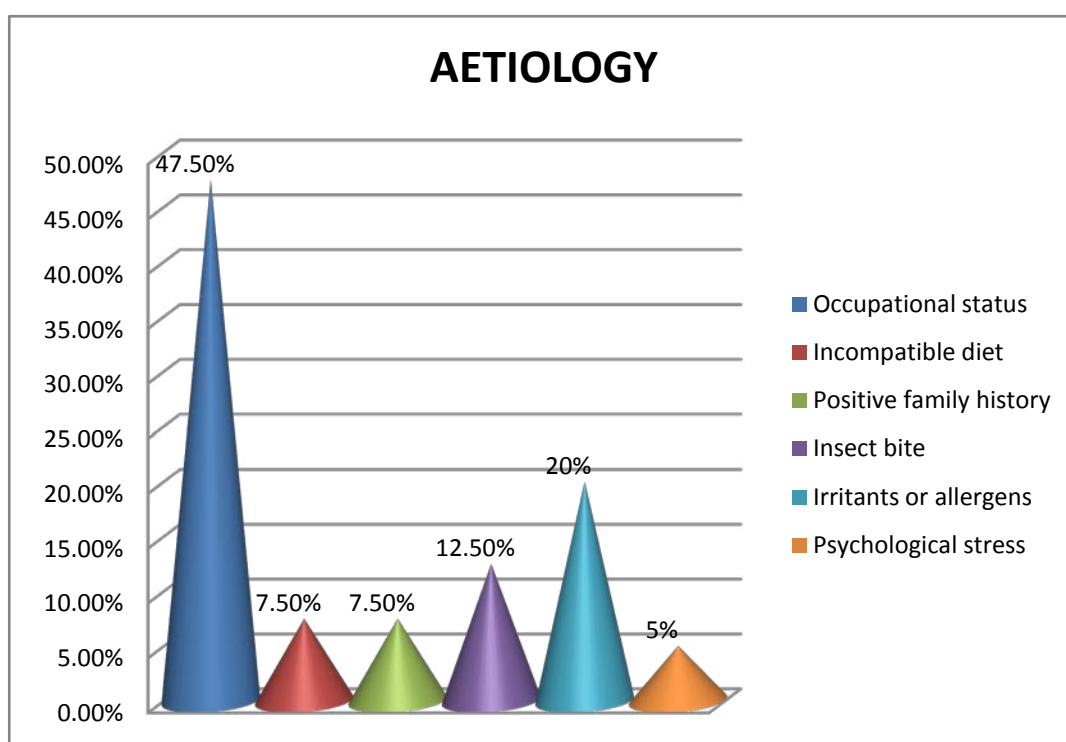


Table 12
CLINICAL FEATURES

Regarding the signs and symptoms

Sl.NO	Clinical features	No. of cases	Percentage
1	Erythema	7	17.5
2	Itching	40	100
3	Vesicles	34	85
4	Oedema	11	27.5
5	Pustules	2	5
6	Oozing	34	85
7	Pain	15	37.5
8	Ulcers	4	10
9	Lichenification	6	15
10	Constipation	10	25

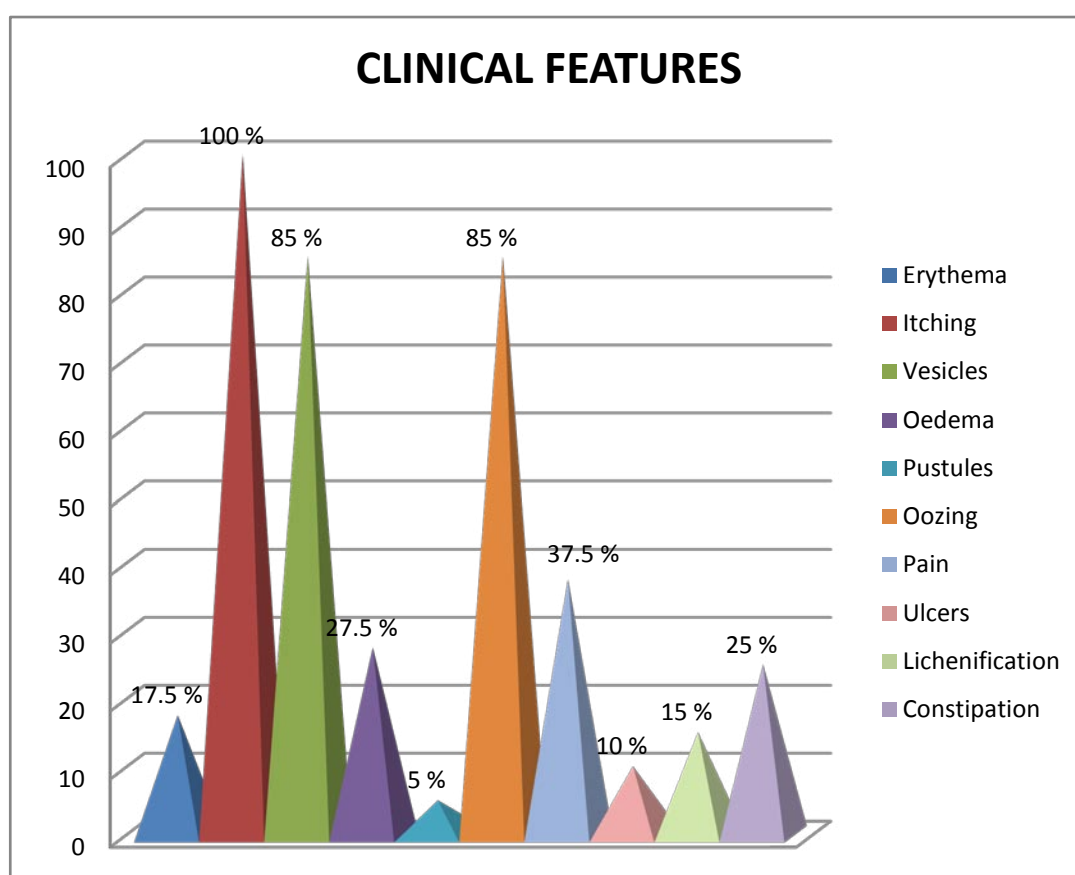


Table 13

ASSOCIATED HISTORY

Vatha karappan is commonly an immunological disorder for all ages, other associated conditions such as bronchial asthma, urticaria were noted in some cases.

S.No.	History	No.of Cases	Percentage
1	Bronchial asthma	6	15
2	Hay fever	-	-
3	Urticaria	10	25
4	Diabetes	2	5
5	Family History	8	8

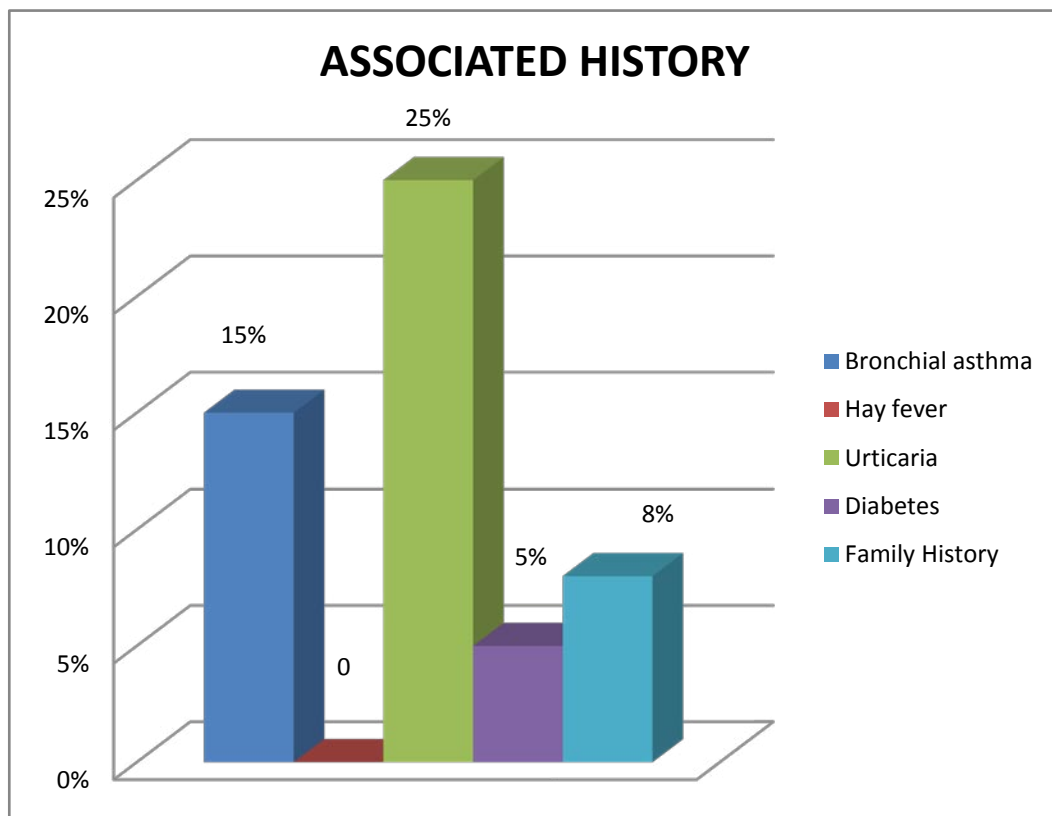


Table 14

INCIDENCE OF UPPER AND LOWER LIMBS

S.No.	Site of lesion	No. of Cases	Percentage
1.	Upper Limbs	36	90
2.	Lower Limbs	2	5
3.	Both upper and Lower limb	2	5

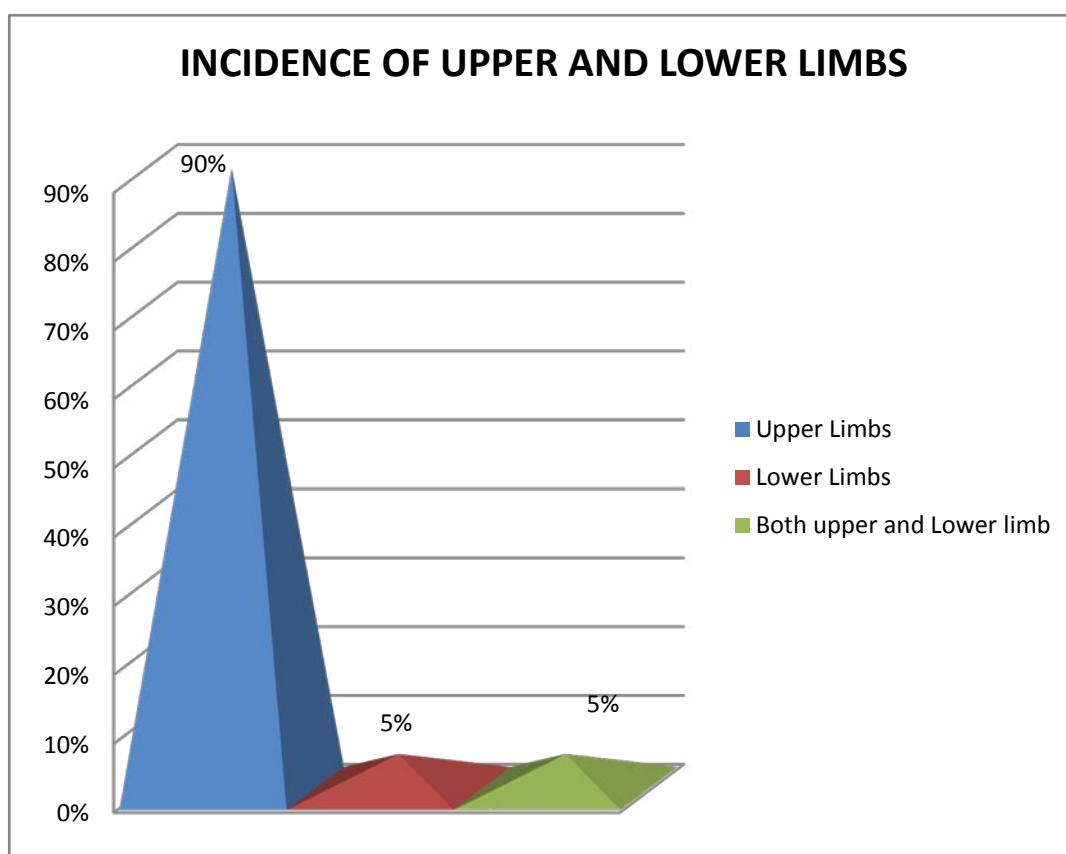
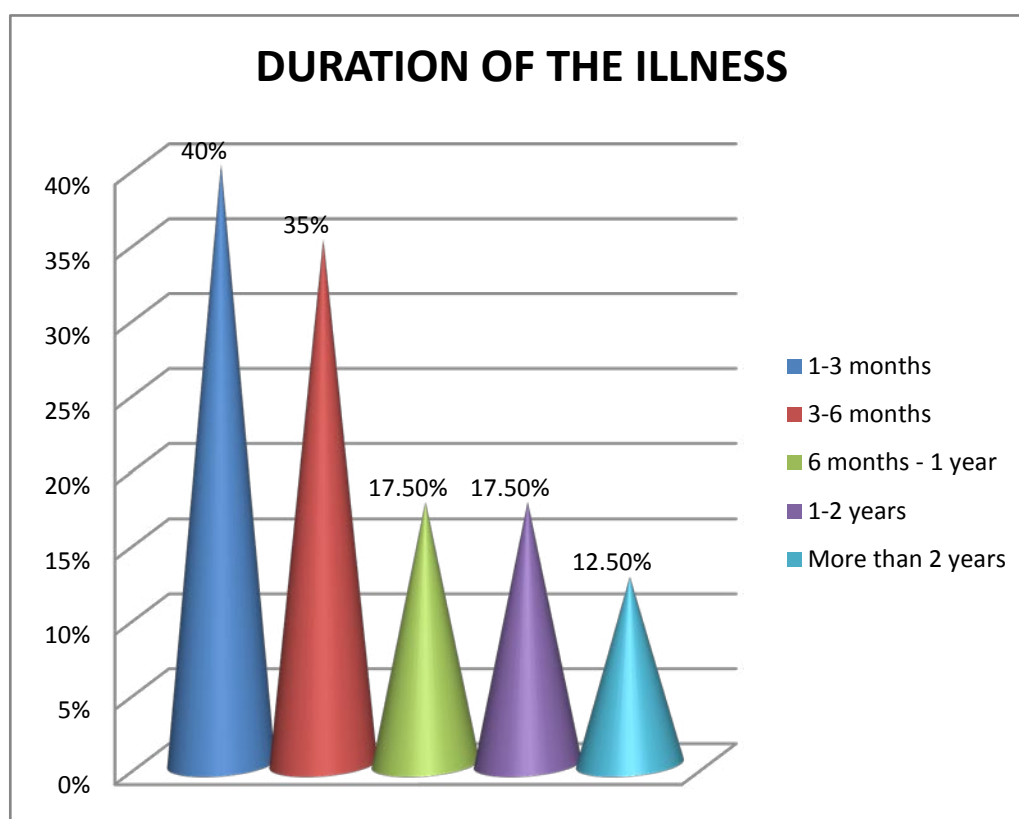


Table 15

DURATION OF THE ILLNESS

S.No.	Duration of the illness	No. of Cases	Percentage
1.	1-3 months	16	40
2.	3-6 months	14	35
3.	6months-1year	7	17.5
4.	1-2 years	7	17.5
5.	More than 2 years	5	12.5



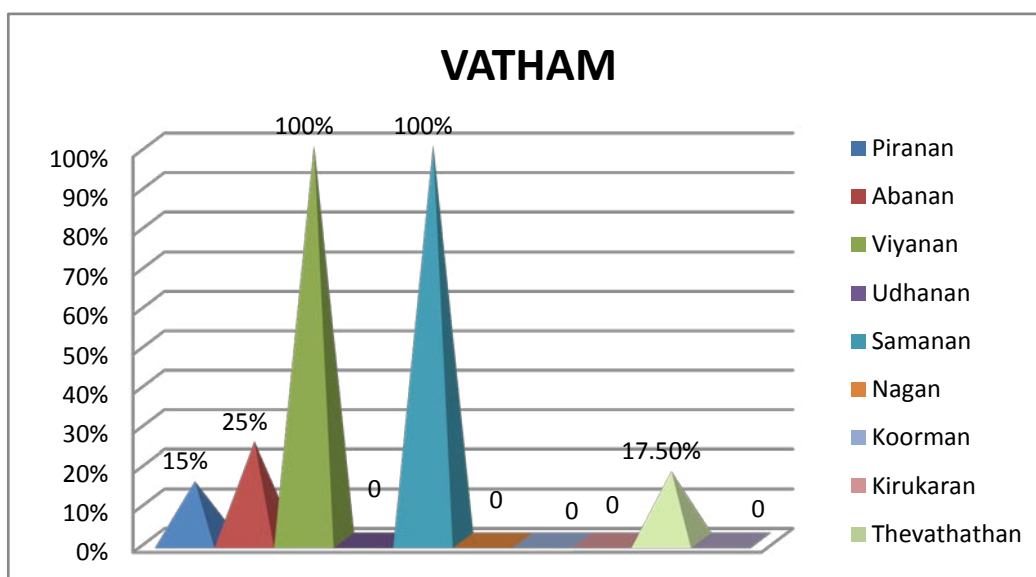
DISTRIBUTION OF UYIR THATHUKKAL

Table 16

DERANGEMENT OF VATHAM

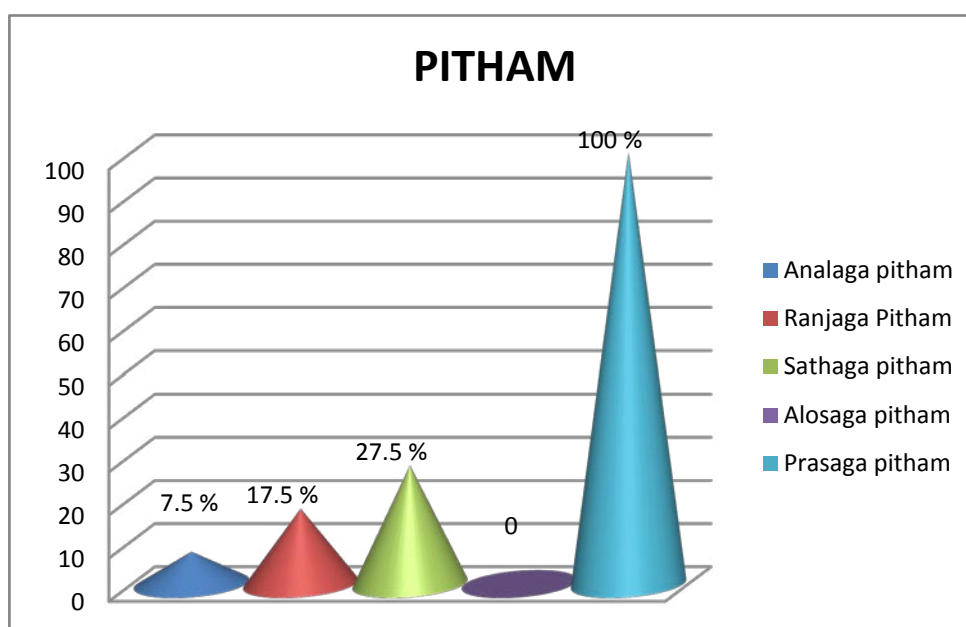
S.No.	Classification of Vatham	No. of cases	Percentage
1.	Piranan	6	15
2.	Abanan	10	25
3.	Viyanan	40	100
4.	Udhanan	-	-
5.	Samanan	40	100
6.	Nagan	-	-
7.	Koorman	-	-
8.	Kirukaran	-	-
9.	Thevathathan	7	17.5
10.	Dhananjeyan	-	-

In Dasa Vayu, Viyanan in 40 patients (100%), Samanan in 40 patients (100%), Pranan in 6 patients (15%), Thevethathan in 7 patients (17.5%).



DERANGEMENT OF PITHAM

S.No.	Classification of pitham	No. of Cases	Percentage
1.	Analaga pitham	3	7.5
2.	Ranjaga Pitham	7	17.5
3.	Sathaga pitham	11	27.5
4.	Alosaga pitham	-	-
5.	Prasaga pitham	40	100



In Pitham, Prasagam were affected in 40 patients (100%), Analaga pitham were affected in 3 patients (7.5%) and Ranjaga pitham were affected in 7 patients (17.5%) .

DERANGEMENT OF KABAM

S.No.	Classification of Kabam	No. of Cases	Percentage
1.	Avalambagam	6	15
2.	Kletham	-	-
3.	Pothagam	-	-
4.	Tharpagam	-	-
5.	Santhigam	10	25

In Kabam, Avalambagam (15%) and Santhegam (25%) were affected
Pothagam, Tharpagam, Santhigam was not affected.

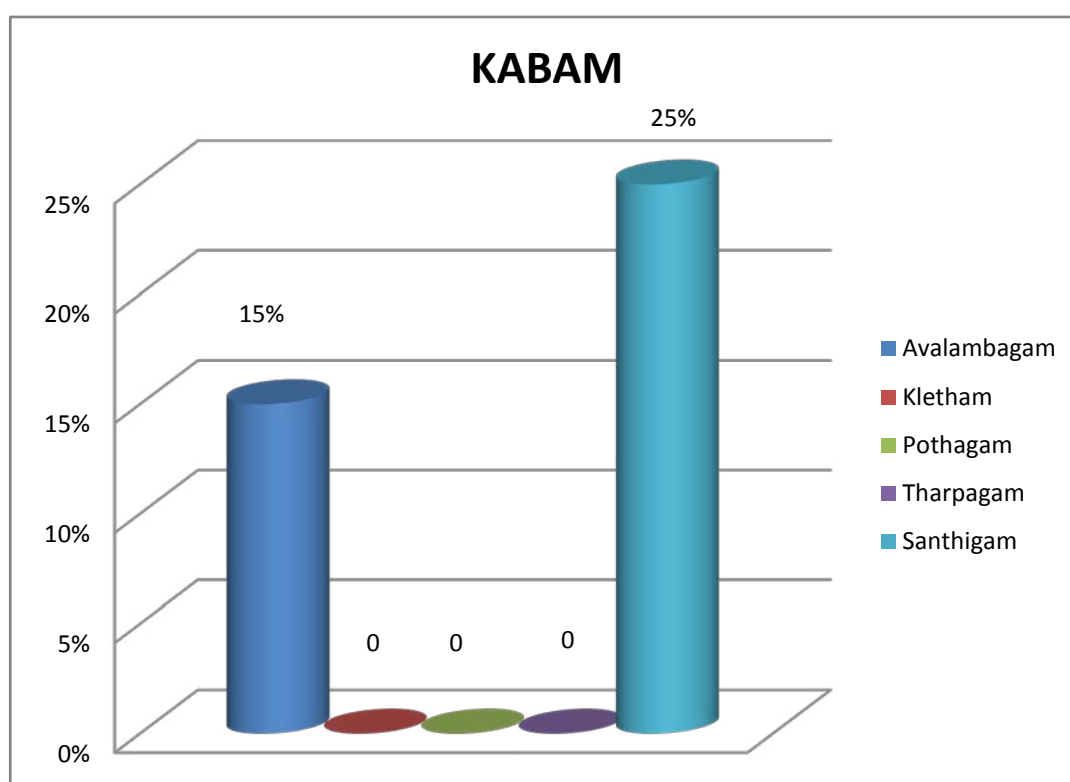


Table 17

UDAL KATTUGAL REFERENCE

S.No.	Udal Kattugal	No. of Cases	Percentage
1.	Saaram	40	100
2.	Senneer	40	100
3.	Oon	40	100
4.	Kozhupu	4	10
5.	Enbu	-	-
6.	Moolai	-	-
7.	Sukilam/ Suronitham	-	-

All 40 patients were affected saaram and senneer, and oon (100%) and kozhupu in 10% cases are noticed. Other udal kattugal were not affected.

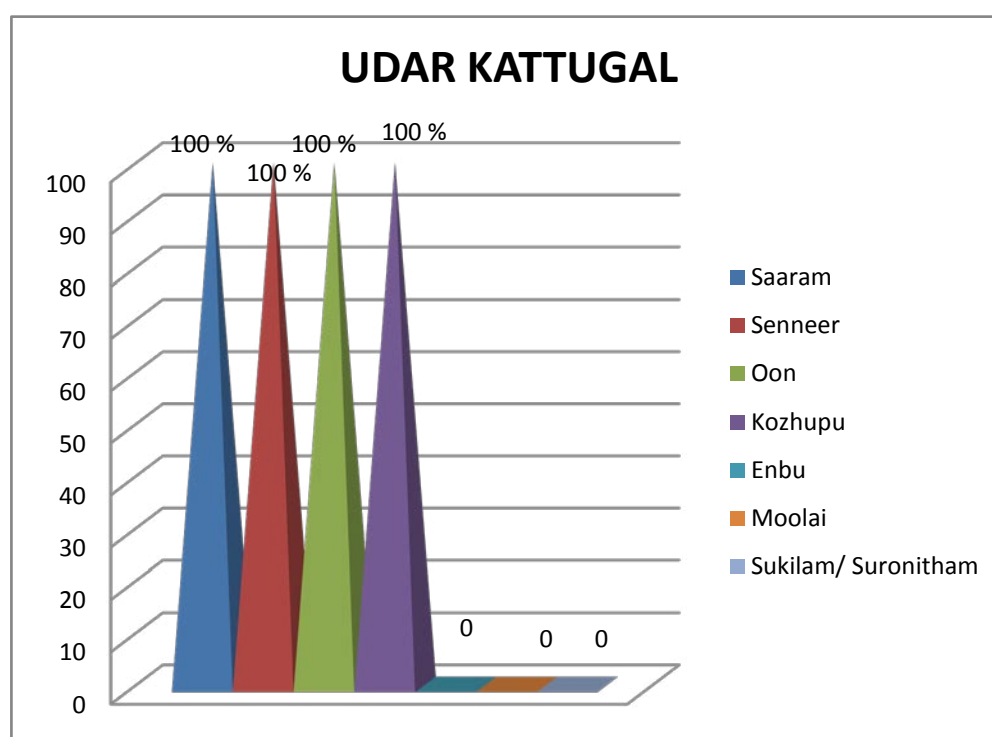


Table 18
ENVAGAI THERVUGAL

S.No.	Envagai Thervugal	No. of Cases	Percentage
1.	Naadi	40	100
2.	Sparisam	40	100
3.	Naa	2	5
4.	Niram	40	100
5.	Mozhi	-	-
6.	Vizhi	-	-
7.	Malam	10	25
8.	Moothiram	-	-

Naadi and niram, sparisam were affected all of the 40 patients (100%), Naa were affected in 2 patients (5%), Malam were affected in 10 patients (20%).

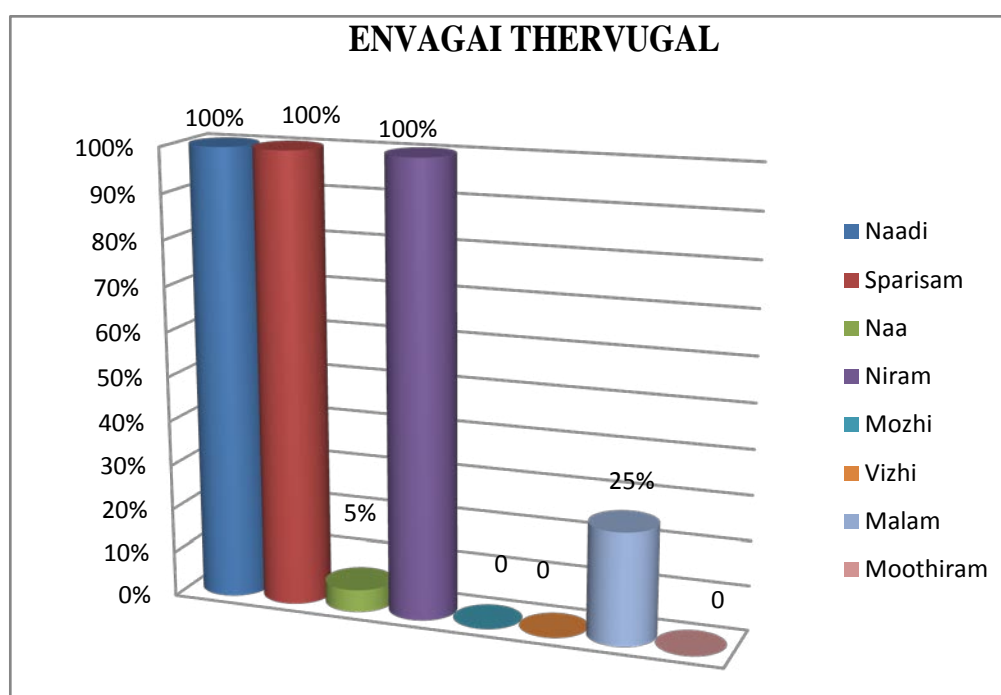


Table 19

NEERKURI AND NEIKURI REFERENCE

S.No.	Type of Test	No.of Cases	Percentage
1	Neerkuri Vaikol niram	40	100
2	Neikuri Spreading like snake Spreading like ring Standing like a Pearl	30 - 10	75 - 25

According to Neikuri in 75% cases it spreads like a snake, in 25% cases it stand like a pearl.

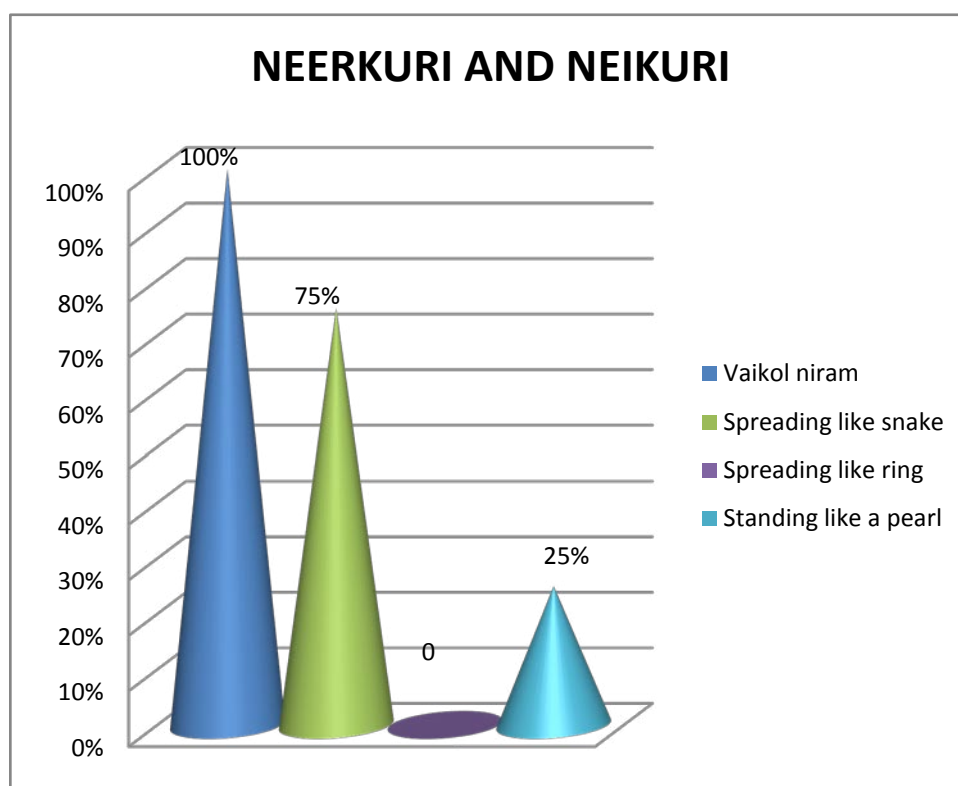
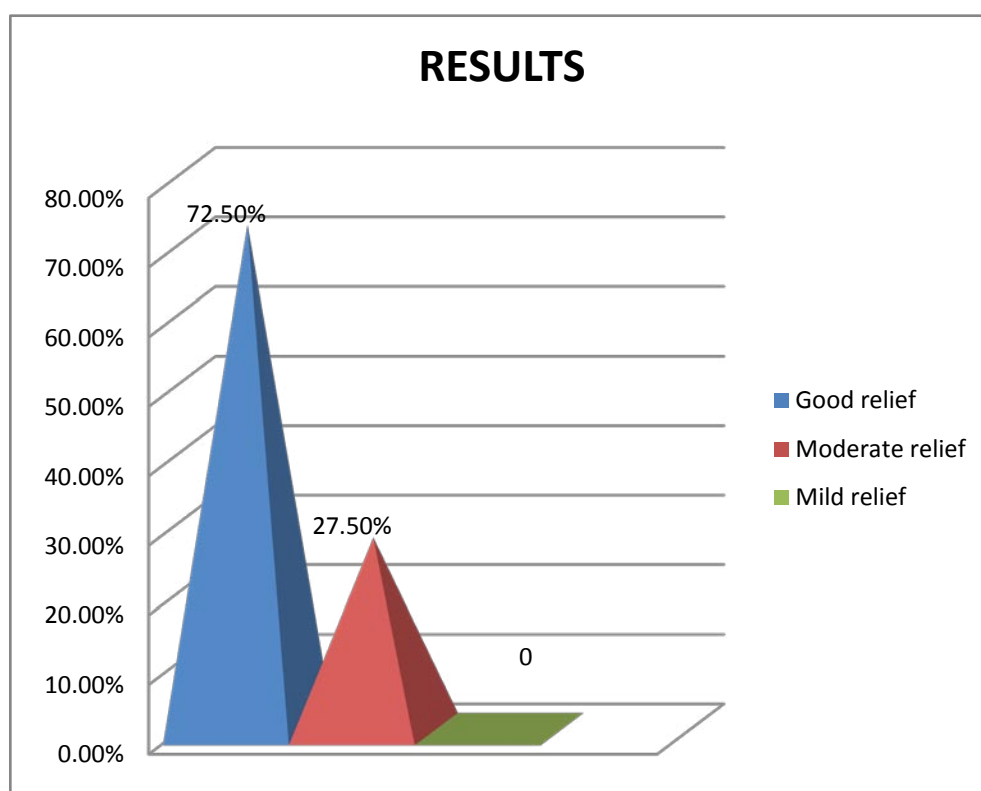


Table 20

RESULTS AFTER TREATMENT

S.No	Results	No. of Cases	Percentage
1.	Good relief	29	72.5
2.	Moderate relief	11	27.5
3.	Mild relief	-	-

Out of 40 patients, 11 patients got moderate relief, 29 patients got good relief.



CASE SUMMARY OF IN-PATIENTS

S.NO	IP.NO	NAME	AGE/ SEX	D.O.A	D.O.D	NO OF DAYS TREA TED	TREATMENT	RESULT
1.	1549	Mukayya	80/M	18.07.11	09.08.11	22	Perumarapattai chooranam 1gm 3 times a day with water. Pungu thylum(External)	MR
2.	1865	Susai rathnam	64/M	16.08.11	17.09.11	31		GR
3.	2261	Balraj	63/M	23.09.11	3.10.11	11		GR
4.	2290	Indra	65/F	26.09.11	14.10.11	19		GR
5.	2883	Annamalai	47/M	8.11.11	OP followup			GR
6.	2755	Veyyilmuthu	51/F	3.11.11	30.11.11	28		MR
7.	3113	Alaghupandiyan	60/M	2.11.11	10.11.11	9		GR
8.	3110	Poyilammal	65/F	1.12.11	21.11.11	21		GR
9.	3211	Alaghuraja	58/M	12.12.11	26.12.11	15		GR
10	3238	Muthayya	70/M	25.12.11	8.1.12	16		MR

CASE SUMMARY OF OUT-PATIENTS

SNO	OP.NO	NAME	AGE/ SEX	COMPLAINTS	NO OF DAYS TREA TED	RESULT
1	46654	Rajam	51/F	Itching,Lichenified,vesicles	45	GR
2	45168	Subramanian	50/F	Itching,vesicles,oozing	30	GR
3	41510	Laaser	57/M	Itching,erythema,vesicles	25	MR
4	40831	Jesuraj	40/M	Itching,erythema,vesicles,oozing	50	GR
5	41899	Gopinath	19/M	Itching,vesicles,oozing	21	GR
6	40453	Karunakaran	60/M	Itching,lichenfication.	14	MR
7	48096	Mariamman	43/F	Itching,vesicles,oozing	29	GR
8	43835	Kannan	55/M	Itching,vesicles,oozing	21	MR
9	45112	Mukkaya	50/M	Itching,vesicles,oozing,oedema	45	GR
10	40594	Subbulashmi	56/F	Itching,vesicles,oozing	21	GR
11	52206	Perumal	65/M	Itching,vesicles,oozing	25	GR
12	45115	Vellayan	55/M	Itching,vesicles,oozing	14	MR
13	47767	Muniaswamy	57/M	Itching,erythema,vesicles	21	MR
14	43097	Mani	37/M	Itching,erythema,vesicles	34	GR
15	47462	Lakshmi	50/F	Itching,lichenification,vesicles	40	GR
16	45168	Subramanian	58/M	Itching,vesicles,oozing	38	GR
17	57825	Pudhiyavan	60/M	Itching,vesicles,oozing	21	GR
18	42109	Shanmugavel	70/M	Itching,lichenification,vesicles	27	GR
19	50906	Muthaya	67/M	Itching,pustules,vesicles	45	GR
20	52307	Muthulashmi	53/F	Itching,lichenfication,vesicles,oozing	40	GR
21	48609	Gandhimathy	50/F	Itching,vesicles,oozing	22	MR
22	51310	Ilavarasi	23/F	Itching,vesicles,oozing	14	MR
23	52462	Sellaya	50/M	Itching,erythema,vesicles	19	MR
24	54236	Muniappapillai	60/M	Itching,vesicles,oozing	27	GR
25	48407	Muthayya	52/M	Itching,lichenfication,vesicles	38	GR
26	58623	Veeradurairaj	47/M	Itching,lichenfication,vesicles	45	GR
27	55896	Periaswamy	45/M	Itching,vesicles,oozing	30	GR
28	65513	Janakiraman	22/M	Itching,vesicles,oozing	28	GR
29	52983	Indra	65/F	Itching,vesicles,oozing	35	GR
30	65550	Eswaran	65/M	Itching,erythema,vesicles	25	MR

TABLE SHOWS LABORATORY INVESTIGATION REPORT OF IN PATIENTS AND OUT PATIENTS

S. NO	OP. NO & IP NO	TC		DC								ESR										Skin Scrapping for fungus		Urine Analysis					
				P		L		E		HB %		BT		AT		BT			AT			BT	AT	BT			AT		
		BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	1/2 hr	1 hr	1/2 hr	1 hr	BS	BU	SC	BS	BU	SC			Alb	Sug	Dep	Alb	Sug	
1	1549	8800	9000	72	74	24	26	4	2	10	12	5	10	3	8	185	46	116	120	30	110	-ve	-ve	NIL	NIL	3-4	NIL	NIL	
2	1865	8500	8600	65	66	31	35	4	2	11	11.1	10	22	7	15	68	28	218	70	28	210	-ve	-ve	NIL	NIL	2-3	NIL	NIL	
3	2267	12700	8500	74	54	20	24	6	2	8.5	9.5	13	57	10	22	98	20	200	87	17	87	-ve	-ve	NIL	NIL	3-4	NIL	NIL	
4	2290	7900	8500	52	56	46	46	2	1	10	11	4	9	4	8	82	16	207	100	17	198	-ve	-ve	NIL	NIL	1-2	NIL	NIL	
5	2833	8000	8700	52	56	45	46	4	2	11	12	1	9	4	8	98	18	140	95	20	120	-ve	-ve	NIL	NIL	NAD	NIL	NIL	
6	2755	8000	9000	56	58	42	42	2	1	9.8	10	1	24	1	3	80	25	155	80	22	150	-ve	-ve	NIL	NIL	1-2	NIL	NIL	
7	3113	9800	9600	74	72	23	26	3	2	11	11	11	3	5	12	88	25	154	80	22	150	-ve	-ve	NIL	NIL	1-2	NIL	NIL	
8	3110	9200	9300	62	64	23	25	5	1	9.5	10	25	52	10	20	78	27	165	90	20	165	-ve	-ve	NIL	NIL	1-2	NIL	NIL	
9	3211	7900	8000	68	70	30	32	2	1	12	12	4	9	4	8	83	38	226	80	38	220	-ve	-ve	NIL	NIL	2-3	NIL	NIL	

10	3638	9200	8500	75	75	22	24	3	1	11	12	1	3	1	3	89	-	207	80	-	200	-ve	-ve	NIL	NIL	1-2	NIL	NIL
11	50900	8900	8500	62	64	30	28	2	1	12	12.5	10	20	5	10	90	20	-	90	-	-	-ve	-ve	NIL	NIL	1-2	NIL	NIL
12	40831	9300	8600	58	60	32	34	10	5	12	12	5	12	3	5	72	-	186	70	20	100	-ve	-ve	NIL	NIL	1-2	NIL	NIL
13	40453	10,800	9500	70	72	25	26	5	3	11	12	4	8	2	4	114	-	294	100	-	90	-ve	-ve	NIL	NIL	NAD	NIL	NIL
14	48096	8200	8500	50	52	45	46	2	1	10	11	9	18	1	3	80	20	171	80	24	85	-ve	-ve	NIL	NIL	NAD	NIL	NIL
15	47767	8000	8600	49	51	48	47	3	1	12	11.5	2	5	1	3	62	30	231	90	25	100	-ve	-ve	NIL	NIL	NAD	NIL	NIL
16	65513	7300	8300	58	60	39	38	3	2	14	13.5	2	5	2	4	109	23	177	100	23	120	-ve	-ve	NIL	NIL	NAD	NIL	NIL
17	65550	8800	8000	52	54	44	43	4	1	11	11	4	9	1	3	194	34	114	115	35	115	-ve	-ve	NIL	NIL	NAD	NIL	NIL
18	61074	7900	7500	64	66	32	30	4	3	8	9	4	9	1	5	87	42	227	80	30	80	-ve	-ve	NIL	NIL	NAD	NIL	NIL
19	52462	8500	8000	54	56	43	42	3	1	11	11	3	7	1	4	102	-	142	70	-	90	-ve	-ve	NIL	NIL	NAD	NIL	NIL
20	45112	9000	9000	56	58	42	44	2	1	8	9	4	8	2	5	80	20	155	75	20	75	-ve	-ve	NIL	NIL	NAD	NIL	NIL

TC - Total Count, DC- Differential Count, P - Polymorphs, L- Lymphocytes, E- Eosinophils, HB- Hemoglobin, ESR-Erythrocytes sedimentation Rate
BT- Before Treatment, AT- After treatment, BS- Blood sugar, BU- Blood Urea, SC-Serum cholestrol,NAD-No abnormal Defect

S. NO	OP. NO & IP NO	TC		DC								ESR										Skin Scrapping for fungus		Urine Analysis		
				P		L		E		HB %		BT		AT		BT			AT			BT	AT	BT		
		BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	1/2 hr	1 hr	1/2 hr	1 hr	BS	BU	SC	BS	BU	SC			Alb	Sug	Dep
21	42109	7000	9100	60	58	30	28	1	1	8	10	4	8	2	4	94	20	310	80	22	300	-ve	-ve	NIL	NIL	3-4
22	57825	9000	8000	56	58	40	38	4	2	9	9	2	5	2	5	84	-	145	84	18	140	-ve	-ve	NIL	NIL	2-3
23	54236	9000	8500	59	60	38	36	3	1	11	12	3	7	3	7	77	-	174	75	-	150	-ve	-ve	NIL	NIL	3-4
24	52206	8000	8000	70	71	24	26	6	4	10	11	3	7	3	7	70	20	212	80	23	200	-ve	-ve	NIL	NIL	1-2
25	55896	9200	9000	56	58	34	32	10	8	11	11	10	22	5	10	98	30	98	90	28	100	-ve	-ve	NIL	NIL	NAD
26	52307	9100	9000	52	50	26	24	2	1	8	8	8	15	4	8	120	20	151	100	23	120	-ve	-ve	NIL	NIL	1-2
27	56896	9500	9500	68	70	30	28	2	1	10	11	4	8	4	8	123	23	146	120	23	130	-ve	-ve	NIL	NIL	1-2
28	46654	7900	8000	62	60	36	34	2	1	8	9.5	3	6	1	3	98	34	140	90	30	120	-ve	-ve	NIL	NIL	1-2
29	51310	9100	9000	55	58	40	40	3	2	8	9	20	45	9	20	78	42	222	80	28	200	-ve	-ve	NIL	NIL	2-3
30	52623	8000	8500	68	65	30	28	2	1	11	12	15	30	5	11	70	-	152	75	-	130	-ve	-ve	NIL	NIL	1-2
31	45113	7000	8000	60	58	38	36	4	2	12	12	25	55	10	22	77	20	176	75	20	150	-ve	-ve	NIL	NIL	1-2
32	47462	11400	9000	74	72	20	18	6	4	13	13	14	35	7	10	78	30	172	80	30	160	-ve	-ve	NIL	NIL	1-2
33	41510	8,700	8500	65	68	30	32	5	3	10	10	5	12	2	6	72	-	134	82	20	120	-ve	-ve	NIL	NIL	NAD
34	48609	9000	8000	60	62	34	36	6	5	10	11	5	10	3	8	76	-	288	76	-	250	-ve	-ve	NIL	NIL	NAD
35	43017	8100	9500	68	70	30	32	2	1	14	14	5	10	2	4	98	32	220	80	30	200	-ve	-ve	NIL	NIL	NAD
36	45168	8500	9000	69	65	20	18	3	1	10	10	12	27	5	10	95	24	212	85	35	210	-ve	-ve	NIL	NIL	NAD
37	40594	8900	8000	62	60	36	34	2	1	11	11	1	2	1	2	81	19	161	70	25	110	-ve	-ve	NIL	NIL	NAD
38	43835	9900	9000	65	64	32	30	3	2	11	12	4	8	4	8	82	-	171	85	-	150	-ve	-ve	NIL	NIL	NAD

39	48407	7900	8000	66	68	30	28	4	2	11	12	1	2	1	2	90	18	186	90	29	180	-ve	-ve	NIL	NIL	NAD
40	41899	7800	7500	56	58	28	26	3	1	10	11	2	4	2	1	95	33	294	98	30	250	-ve	-ve	NIL	NIL	NAD

TC - Total Count, DC- Differential Count, P - Polymorphs, L- Lymphocytes, E- Eosinophils, HB- Hemoglobin, ESR-Erythrocytes sedimentation Rate
BT- Before Treatment, AT- After treatment, BS- Blood sugar, BU- Blood Urea, SC-Serum cholestrol,NAD-No abnormal Defect

OP. NO & IP NO	TC		DC								ESR			
			P		L		E		HB %		BT		AT	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	1/2 hr	2 hr	1/2 hr	2 hr
-6530.4	-7688.9	-8847.4	-10006	-11164	-12323	-13481	-14640	-15798	-16957	-18115	-19274	-20432	-21591	4
-9578.8	-11498	-13417	-15336	-17255	-19174	-21094	-23013	-24932	-26851	-28770	-30689	5	2	5
-9092.8	-10922	-12750	-14579	-16408	-18236	-20065	-21894	-23723	-25551	-27380	-29209	7	3	7
-8678	-10421	-12164	-13907	-15650	-17393	-19136	-20879	-22622	-24365	-26108	-27851	7	3	7
-8900.4	-10572	-12245	-13917	-15589	-17261	-18933	-20605	-22277	-23949	-25621	-27293	-28965	15	20
-8858.2	-10644	-12431	-14217	-16003	-17789	-19576	-21362	-23148	-24934	-26721	-28507	15	4	8
-9579.6	-11509	-13439	-15369	-17298	-19228	-21157	-23087	-25017	-26946	-28876	-30806	8	4	8
-7876.5	-9464.9	-11053	-12642	-14230	-15818	-17407	-18995	-20584	-22172	-23760	-25349	6	1	3
-8708.3	-10467	-12225	-13984	-15742	-17501	-19259	-21018	-22776	-24535	-26293	-28052	45	9	20
-8762.6	-10525	-12288	-14050	-15813	-17575	-19338	-21100	-22862	-24625	-26387	-28150	30	5	11
-7169.9	-8521.4	-9872.8	-11224	-12576	-13927	-15279	-16630	-17982	-19333	-20685	-22036	-23388	34	46
-8389.2	-10093	-11797	-13500	-15204	-16908	-18612	-20315	-22019	-23723	-25427	-27130	35	7	10
-7247.3	-8,720	-10193	-11666	-13139	-14612	-16085	-17558	-19031	-20504	-21977	-23450	12	2	6
-8262.3	-9928.5	-11595	-13261	-14927	-16593	-18259	-19925	-21592	-23258	-24924	-26590	10	3	8

-7457.4	-8975	-10493	-12010	-13528	-15045	-16563	-18081	-19598	-21116	-22634	-24151	10	2	4
-7779.2	-9356.5	-10934	-12511	-14088	-15666	-17243	-18820	-20398	-21975	-23552	-25130	27	5	10
-7110.8	-8555	-9999.1	-11443	-12887	-14332	-15776	-17220	-18664	-20108	-21552	-22996	2	1	2
-7726.8	-9298.3	-10870	-12442	-14013	-15585	-17156	-18728	-20299	-21871	-23443	-25014	8	4	8
-8128.4	-9765.3	-11402	-13039	-14676	-16313	-17950	-19587	-21224	-22861	-24497	-26134	2	1	2
-7162.8	-8610.4	-10058	-11506	-12953	-14401	-15848	-17296	-18744	-20191	-21639	-23086	4	2	1

ESR										Skin Scrapping for fungus		Urine Analysis			
BT		AT		BT			AT			BT	AT	BT			Alb
1/2 hr	2 hr	1/2 hr	2 hr	BS	BU	SC	BS	BU	SC			Alb	Sug	Dep	
-19274	-20432	-21591	4	218.267	241.295	264.324	287.352	310.381	333.41	-ve	-ve	NIL	NIL	3-5	NIL
-30689	5	2	5	84	-	76.5	68.4	60.3	52.2	-ve	-ve	NIL	NIL	2-4	NIL
-29209	7	3	7	77	-	-24	-123	-	150	-ve	-ve	NIL	NIL	3-5	NIL
-27851	7	3	7	153.533	168.59	183.648	198.705	213.762	228.819	-ve	-ve	NIL	NIL	1-3	NIL
-27293	-28965	15	20	73.6	73.4857	73.3714	73.2571	73.1429	73.0286	-ve	-ve	NIL	NIL	NAD	NIL
-28507	15	4	8	84.8	83.6	82.4	81.2	80	78.8	-ve	-ve	NIL	NIL	1-2	NIL
-30806	8	4	8	95.0667	95.3238	95.581	95.8381	96.0952	96.3524	-ve	-ve	NIL	NIL	1-2	NIL
-25349	6	1	3	90.1333	91.5048	92.8762	94.2476	95.619	96.9905	-ve	-ve	NIL	NIL	1-2	NIL
-28052	45	9	20	150.933	163.105	175.276	187.448	199.619	211.79	-ve	-ve	NIL	NIL	2-4	NIL
-28150	30	5	11	70	-	-2	-79	-	130	-ve	-ve	NIL	NIL	1-2	NIL
-22036	-23388	34	46	112.733	120.276	127.819	135.362	142.905	150.448	-ve	-ve	NIL	NIL	1-2	NIL
-27130	35	7	10	123.467	132.552	141.638	150.724	159.81	168.895	-ve	-ve	NIL	NIL	1-2	NIL
-23450	12	2	6	72	-	63	52.6	42.2	31.8	-ve	-ve	NIL	NIL	NAD	NIL
-26590	10	3	8	76	-	-136	-348	-	250	-ve	-ve	NIL	NIL	NAD	NIL
-24151	10	2	4	146.4	156.8	167.2	177.6	188	198.4	-ve	-ve	NIL	NIL	NAD	NIL
-25130	27	5	10	158.267	172.01	185.752	199.495	213.238	226.981	-ve	-ve	NIL	NIL	NAD	NIL
-22996	2	1	2	84.8667	86.9238	88.981	91.0381	93.0952	95.1524	-ve	-ve	NIL	NIL	NAD	NIL
-25014	8	4	8	82	-	-1	-87	-	150	-ve	-ve	NIL	NIL	NAD	NIL
-26134	2	1	2	137.533	148.59	159.648	170.705	181.762	192.819	-ve	-ve	NIL	NIL	NAD	NIL
-23086	4	2	1	190.333	206.619	222.905	239.19	255.476	271.762	-ve	-ve	NIL	NIL	NAD	NIL

IP .No : 1865
Name : Susairathnam
Age / Sex : 64 /M

Before Treatment



After Treatment



Discussion

Vatha karappan

DISCUSSION

The main characteristic features of “Vatha Karappan” are itching, oozing, erythema, oedema, vesicles and papules. This disease can be more or less correlated with “Eczema” in modern medicine.

Causative factors

According to the Siddhars view, it was stated that excessive intake of fish, mutton, low grade food materials like meat, varagu, thinai, rhizomes and root of some plants are the main causes for this disease. Also all the anti - social activities result in psychic disturbances leading to this disease.

Regarding to the etiology of “Eczema” in modern medicine, hypersensitivity to variety of contact allergens (plants, cosmetics, clothing and medicaments), irritants (physical and chemical) history of allergies, emotional factors and familial predisposition are the causes.

This dissertation work includes a literary collection of views both Siddha and modern aspects of this disease. For the clinical study of 40 patients, they were diagnosed clinically, as Vatha Karappan, as per the symptamatology and the Envagai thervugal and other Siddha methods of diagnosis were selected, in that 10 patients were admitted in inpatient ward and 30 patients were treated as out patients.

On the day of enrollment, routine lab investigations (Blood, and urine tests), general and systemic examinations, Neerkuri and Neikuri were done in all 40

patients in both Siddha and modern aspects. An individual case sheet was prepared and maintained in all the patients.

On early morning, the next day of admission Vellai ennai 15 ml was given as the initial treatment of skin disease for neutralizing the vitiated vaadham to some patients.

The internal medicine **Perumarapattai chooranam** 1gm tds with water after meals and the external medicine **Pungu thylum** were given to all patients regularly. All the patients were advised to follow pathiyam, yogasanam, prayanam and thiyaanam as supportive measures to relieve mental stress and strain.

1) SEX DISTRIBUTION:

40 patients of both sexes were selected for the dissertation study. Among 40 cases, 26 were males and 14 were females. The sex incidence is higher in males than females. According to the Siddha literatures, there is no apparent sex predilection in Vatha Karappan. Males are become vulnerable victims because of their occupational indifference, mental strain, faulty life styles, when compared to females.

2) AGE DISTRIBUTION:

During this study, the prevalence of Vatha Karappan was a common one affecting the adult age group mainly above 50 years.

3) KAALAM DISTRIBUTION:

Out of 40 patients,

75% of the patients belonged to Pitha Kaalam.

15% of the cases belonged to Kabha kaalam.

10% of the patients belonged to Vatha Kaalam.

These research study shows that more patients were affected in Pitha Kaalam.

4) OCCUPATIONAL STATUS:

Occupational hazards play a major role in causing or aggravating the disease Vatha Karappan.

5) SOCIOECONOMIC STATUS:

Out of 40 patients, 32 were belonged to poor economic conditions. Majority of them were ignorant of personal hygiene. Malnutrition, prolonged and persistent exposure to polluted atmosphere, lowered immune responses made them prone to this type of disease.

6) DIET REFERENCE:

During the study, 95 patients were mixed dietary habits. Also some food stuffs like ragi, brinjal, maize, tomato and fish items can be the causative factors for Vatha Karappan. So they were advised to avoid those items.

Constipation was present in 10 cases, which also intensified the condition. Hence they are advised to consume fiber rich diet and plenty of water intake.

7) SEASONAL REFERENCE:

Skin diseases are prone to have definite seasonal influences.

Out of 40 patients, 18 patients were affected in Pinpani kaalam, 8 patients were affected in Munpani and Mudhuvenil kaalam, 6 patients were affected in Elavenil kaalam.

8) THINAI:

100% of patients belonging of Marutha Nilam. Siddha literature reveals that Marutha Nilam is a Place that can be regarded as “Disease free Zone” and cures all the disease. Here Patient developed the disease due to alteration in their food habits and routine activities and the uses of too much of pesticides and chemicals.

9) MODE OF ONSET:

During the study out of 40 cases, 70% cases were found to be observed to be chronic onset. Incomplete treatment, failure to follow medical advice and dietary restrictions, psychological strains and changed life style were observed to be the reasons for this disease to be chronic.

10) AETIOLOGY:

All type of etiological factors was observed during the study, as Vatha Karappan is one among the immunological disorders like bronchial asthma, which may affect subsequent generations. Also positive family history and incompatible diet was found in 3 cases, occupational relevant in 19 cases, irritants or allergens in 8 cases, insect bite in 5 cases and psychological stress and strain in 2 cases were also noted.

11) REFERENCE OF MUKKUTRAM:

a) Affected Vatham:

1. Pranana was affected in 6 cases (Bronchial asthma).
2. Abanana was affected in 10 cases (Constipation).
3. Thevathathan affected in 7 cases. It is responsible for sleep and anger.
4. Viyanana and Samanana affected 100% of cases. It is responsible for all the movement of the body.

b) Affected Pitham:

1. Anar Pitham was affected in 3 cases (loss of appetite).
2. Ranjaga Pitham was affected in 7 cases - It gives colour to the blood. (Decreased hemoglobin).
3. Prasaga Pitham was affected in all the cases - It gives complexion to the skin. (Vesicles, oozing, dryness, roughness and hyper pigmentation).
4. Sathagam was affected in 11 cases (inability to do normal works).

c) Affected Kabham:

1. Avalambagam was affected in 6 cases (Bronchial asthma).
2. Kilethagam was affected in 3 cases - It gives partial digestion of food.
3. Santhigam was affected in 10 cases (joint pain).

12) IN UDAL KATTUKKAL:

Among the seven udarkattukal,

- 1) Saaram was affected in all cases (depression, lethargy).
- 2) Senner was affected in all cases (vesicles, papules).
- 3) Oon was affected in all cases (vesicles, oozing).
- 4) Kozhuppu was affected in 4 cases (ulcer).

13) IN ENVAGAI THERVUGAL:

Among the 40 cases,

1. Niram (colour changes) and sparisam (heat to touch) were affected in 100% of cases.
2. Naadi of patients have the higher incidence of Pitha Vatham in 33 cases, and Vatha Kabham in 7 cases.

13) REFERENCE OF NEERKURI AND NEIKURI:

In Neerkuri 100% of patients had straw coloured urine.

In Neikuri process the oil resembled that, in 10 cases spreading like pearl, in 30 cases spreading like snake.

INVESTIGATION:

Besides Siddha investigation, the modern diagnostic procedures were also done. Routine examinations of blood urine and other investigation, procedures were carried out in the patients.

MANAGEMENT:

Siddha system the treatment is based on the deranged Dhosa. The deranged Vatha are brought down by Viresanam respectively.

Initially,

Vellai ennai- 15ml with hot water in empty stomach at early morning.

DRUG:

Internal:

- 1) **PERUMARAPATTAI CHOORNAM:** 1gm three times a day with water

External:

- 2) **PUNGU THYLUM**

The trial drugs were administered to the patients from the time of admission in the in-patients ward and continued till the symptoms reduced. The treatments aimed at providing relief from symptoms and control the predisposing factor diet restrictions was instructed to the patient during the course of treatment.

During discharge, the patient was advised to follow yogasanas and pranayamam. These helped them to prevent recurrences and patients felt well in doing them.

RESULT:

Good relief: 72.5%

Moderate relief: 27.5%

No toxic (or) side effect were clinically and reportedly observed in any case during the course of the treatment.

Summary

Vatha karappan

SUMMARY

- The dissertation work on Vatha Karappan was chosen by the author, with an intention to give physical and mental and also clinical relief to the patients those who are suffering from this disease, with out any side effects.
- The literature evidence was collected from Yugi Vaithiya Chindamani and the drug evidence from Agathiyar 2000 and Yugi Muni Vaithiya Kaaviyam.
- 40 Patients were selected across different age and sex category from the Post Graduate Sirappu Maruthuvam Department, Govt.Siddha Medical College, Palayamkottai, for study purposes.
- The signs and symptoms of Vatha Karappan are mostly related to eczema in modern aspects.
- History, Clinical findings, Laboratory results, Envagai thervugal, Udal thathukkal and Uyirthatthukkal were used for the diagnostic purpose.
- They were treated with “Perumarapattai chooranam” (Internal) and “Pungu thylam” (External).
- The general improvement of the patient condition was observed from the end of the first week itself.
- Along with medication, the patients were advised over their dietary habits and to practice prayanamas and yoga.

- The clinical findings reveal about the disease and its impact in the body, statistics taken with the help of details in the case sheet, were dealt in details in observation and results which gave clear knowledge about the disease.
- During and after the course of treatment no side effects were reported.
- The efficacy of the drugs was studied by Bio-chemical analysis and pharmacological analysis.
- The result of the biochemical analysis is concluded that the drug Perumarapattai Chooranam indicates the presence of Calcium, Starch, unsaturated compound, reducing sugar and amino acid.
- The result of the pharmacological study is concluded that the drug Perumarapattai Chooranam has
 - ✓ Significant anti histamine action.
 - ✓ Significant acute and chronic inflammatory action.

Pungu thylam has

- ✓ Significant acute anti inflammatory action.
- The above results shown that the trial drug Perumarapattai chooranam (internal) and Pungu thylam (external) has clinically significant action.

Conclusion

Vatha karappan

CONCLUSION

- When Perumarapattai chooranam and Pungu thylum were administered to the Vatha Karappan patient, following results were observed.
- Results show that 72.5 % of patients showed good relief and 27.5% cases had moderate relief.
- The disseration drug was very effective to the patients and there was no recurrences of symptoms were reported.
- Cost of the drug is very cheap and free from side effect. So they are useful for long term purposes
- Hereby the author concludes that the treatment with drug Perumarapattai Chooranam (internal) and Pungu thylam (external) for Vatha Karappan was found very effective in point of efficacy and safety.

SCREENING COMMITTEE


CHAIRMAN :


Dr. N. CHANDRA MOHAN DOSS, M.D.,(B)
Prof. & Head of the Dept. of
Kuzhanthai Maruthuvam
Govt. Siddha Medical College
Palayamkottai

MEMBER I :


Screening Committee
Govt. Siddha Medical College Hospital,
Palayamkottai - 627 002.

MEMBER II :


Head of Department
P.G. NRI NADAL (Pathology)
Govt. Siddha Medical College,
PALAYAMKOTTAI - 627 002.

REMARKS :

INSTITUTIONAL ANIMAL ETHICS COMMITTEE (I.A.E.C)

GOVERNMENT SIDDHA MEDICAL COLLEGE

PALAYAMKOTTAI

No...../IAEC/GSMC/2011-12 DT. 3.5.2011.....

CERTIFICATE

This to certify that the project title A study on VATHA KARAPPAN
..... and the drug of choice is PERUMARAPATTAL CHOORNAM
..... and PUNAV THYLAM

Has been approved by the IAEC on condition basis.


Name of chairman:


Name of Member secretary:

Nominee:

Signature with date:

(Kindly make sure that minutes of the meeting duly signed by all the participants are maintained by office)

GOVT. SIDDHA MEDICAL COLLEGE,

PALAYAMKOTTAI, TIRUNELVELI

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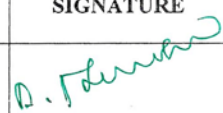
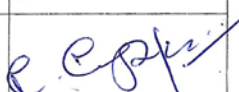
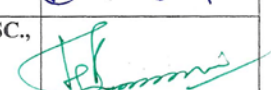


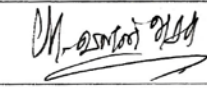

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Dr.A.K. SUMATHI Reg. No.32092010

TITLE : A STUDY ON VATHA KARAPPAN

DEPARTMENT OF SIRAPPU MARUTHUVAM

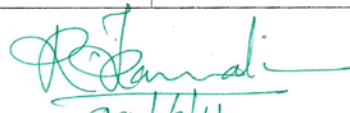
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Annexures

Vatha karappan

*Preparation and properties
of the Trial Medicines*

Vatha karappan

வெளிமருந்து - புங்கு தைலம்



உள்மருந்து - பெருமரப்பட்டை சூரணம்



ANNEXURE I
PROPERTIES OF TRIAL MEDICINE
PERUMARAPATTAI CHOORANAM

INGREDIENTS:

Perumarapattai	-	500 mg
Chukku	-	500 mg
Seeragam	-	500 mg
Kadugurohini	-	500 mg
Citraarathai	-	500 mg
Kandankathiri	-	500 mg
Sengatharai pattai	-	500 mg
Karungeeragam	-	500 mg
Sangam ver	-	500 mg

Method of purification:

The drug has to be cleaned thoroughly and washed with water and allowed to dry in sunshade.

Method of preparation:

Purified drug is heated in frying pan and grinded well into fine powder and filtered with pure white cloth (vasthrakayam). Then the powder is collected and preserved in the air tight container.

“கரந்திடு பெருமரத்திற் கண்டங்கத் திரியுஞ்சுக்குள்

சுரந்திடு செங்கத்தாரி தொன்னுச் ரகமிரண்டு

பரந்திடு கடுகுரோகிணி பகர்சங்கு மரத்தை கூட்டி

நிரந்திடி மிதனைக் கொள்ள நீங்கிடுங் துரப்பன்றானே” (பாடல் - 44)

அகத்தியர் 2000 மூன்றாம் பாகம் ப.எண். 73

பெருமரப்பட்டை சூரணம் -உள்மருந்து

பெருமரப்பட்டை



கடுகுரோகிணி



செங்கத்தாரிபட்டை



சுக்கு



சிற்றரத்தை



கருஞ்சீரகம்



சங்கமுவேர்



சீரகம்



கண்டங்கத்திரி வேர்



CHUKKU: (சுக்கு)

வேறு பெயர் - அருக்கன், அதகம், விடமூடிய அமிர்தம் நாகரம்

Botanical name: Zingiber officinale

Family: Zingiberaceae

சுவை - கார்ப்பு
தன்மை - வெப்பம்
பிரிவு - கார்ப்பு

பொது குணம்:

சூலை மந்தம் நெஞ்செரிப்பு தோடமேப் பம்மழலை

மூலம் இரைப்பிருமல் முக்குநீர் - வாலகப்

தோடமதி சாரற் தொடர்வாத குன்மநீர்த்

தோடம் ஆமம்போக்குஞ் சுக்கு.

செரியாமை, புளியேப்பம், வெப்பம், இரைப்பு இருமல், கழிச்சல், நீரேற்றம், குன்மம், தலைநோய், தலைவலி, பாண்டு, ஐயசுரம் போம்.

Uses: Rhizomes forms the source of the drug ginger which is used as a carminative and stimulant, are also given in flatulence and colic.

Chemical constituents: Rhizomes contain the following chemical constituents such as Essentiol oil, Ginger diol, Zingiberene, Zingiberol, Curcumin, Oleoresin, gingerin, gingerol.

CHEERAGAM (சீரகம்)

வேறு பெயர் அசை, சீரி, உபகும்பபிசம், நற்சீரி, பித்தநாசினி, மேத்தியம்

Botanical name : Cuminum cyminum

Family – Apiaceae

சுவை - கார்ப்பு, இனிப்பு

தன்மை - தட்பம்

பிரிவு - இனிப்பு

Medicinal properties: Carminative, stomachic, astringent, anthelmintic, digestive, constipating.

Uses: Asthma, colic, dyspepsia, fever, flatulence, helminthiasis, leprosy, leucorrhea, skin disease, vomiting.

KARUNGEERAGAM (கருஞ்சீரகம்)

வேறு பெயர் - அரணம், உபகுஞ்சிகை

Botanical name: *Nigella sativa*

Family: Ranunculaceae

சுவை - கைப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“கருஞ்சீரகத்தான் கரப்பகுனாடு புண்ணும்

வருஞ்சீராய்ப் பிருசமு மாற்றும் அருந்ததினால்

காய்ச்சல் தலைவலியுங் கண்வளியும் போமூலகில்

வாய்ச்ச மருந்தெனவே வை.”

குணம் - மண்டைக்கரப்பான், புண், உட்கூடு, தலைநோய், கண்ணோய், சிரங்கு, வயிற்றுபொருமல், குண்மம், மார்புவலி, இருமல், வீக்கம், காமாலை ஆகியவைகளும் கருஞ்சீரகத்தால் நீங்கும்.

Chemical constituents: Nigellone, Nigellidin alkaloid, volatile oil, fatty acids, oleic acid, melantin, metarbin.

Medicinal properties: Anthelmintic, anti-inflammatory, thermogenic, fermifuge, carminative, diuretic, expectorant, digestive.

Medicinal uses: Diarrhoea, eczema, skin disease, amenorrhoea, dyspepsia, fever, flatulence, leucoderma, leprosy, and jaundice.

KADUGUROHINI (கடுகுரோகிணி):

வேறு பெயர் - கடகரோகிணி, கடுரோகிணி

Botanical name: Picrorhiza kurroa

Family: Scrophularaceae

சுவை - கைப்பு, கார்ப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“ மாந்தஞ் சுரமையம் வாயுகரம் பானாமஞ்
சேர்ந்தமலக் கட்டு திரிதோடம் -போந்தபெட்டுப்
புண்வயிறு நோயிவைபோம் பொற்காபுயே
திண்கடுகு ரோகணிக்குத் தேர்.”

குணம் -மாந்தம்,சுரம், கரப்பான், சீதக்கழிச்சல், வயிற்றுவலி, புண்கள் இவைகளை
போக்கும்.

Chemical constituents: Rhizome contains a bitter glucoside, katkin, apocyanin,
picrorhizin, kutkin, vannilic acid.

Medicinal properties: Acrid, anthelmintic, anti-inflammatory, carminative,
digestive, expectorant

Uses: Fever, eczema, respiratory disorder, amenorrhoea.

CITRAARATHAI (சிற்றரத்தை)

Botanical name: Alpinia galangal

Family: Zingiberaceae

சுவை - கார்ப்பு

விரியம் - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“வாதபித்தங்கரப்பான் வாதஞ் சிரோரோகஞ்

சேர்ந்தகப முத்தோடஞ் சீதமொடு - நோந்தசுரம்

மற்றரத்தைக் காட்டி வருமிரும ஒந்தீரும்

சிற்றரத்தை வன்மருந்தால் தேர்.”

(தேகு)

வளியுயக் குற்றங்கள், கரப்பான், வாயு, தலைநோய் , இருமல், பல சுரம் ஆகிய இவைகளை போக்கும்.

Chemical constituents: Essential oil, quercetin, kaempferol, kaemferide, quercetin 3 methyl ether, galagin, galanolactone, galangal A&B.

Medicinal properties: Acrid, aphrodisiac, aromatic, bitter, carminative, expectorant, febrifuge, stimulant, stomachic,

Uses: Skin disease, indigestion, joint pain, fever, ddyspepsia, leucoderma, piles, and diabetes.

KANDANGKATHIRI VER (கண்டங்கத்திரி வேர்)

Botanical name: Solanum surattense

Family: Solanaceae

சுவை - கார்ப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

Chemical constituents: Beta carotene, scopoletin, diosgenin, glucoside, beta sitosterol, arachidic acid, linoleic acid, oleic acid, palmitic acid, diosgenic.

Medicinal properties: Alterative, anthelmintic, antiasthamatic, digestive, febrifuge, bitter, pungent.

SENGATHARAI PATTAI

Botanical name: Capparis aphylla

Family: Capparaceae

Chemical constituents: Spermidineall, used for inflammation, asthma, and gout.

Uses: Boils, eruptions, vomit, arthritis, chronic and foul ulcers, cardiac debility.

SANGAN VER (சங்கன் வேர்)

வேறு பெயர் - சங்கஞ்செடி, ஒற்சங்கன், முட்சங்கன்

Botanical name: Azima tetracantha

Family: Verbenaceae

சுவை - கைப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“சங்கம்வேர்ப் பட்டை சளியிருமலைச் சுரத்தை

அறுகவா தக்கடுப்பை ஆடதைப்பைப் - பங்கமே

செய்யுங் கிரந்தியையுள் தீகால் கிருமியையிவ்

வையற் தனிலொழிக்கு மால்.”

Chemical constituents: Plants contain clerodane diterpleno-clerodermic acid, friedelin, methoxy flavones, acacetin, apigenin.

Uses: Glandular swelling, eczema, leucorrhea, scabies, pain in disease of vatham, snake bite.

PERUMARAM (பெருமரம்)

வேறு பெயர் - பீநாறி மரம்

Botanical name: Sterculia foetida

Family: Sterculiaceae

சுவை - கைப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“பெருமரப் பட்டையது பேதி கிராணி

மருவிரத்த நோயினத்தை மாற்றுந்திருவே

நடலையுரி வாதத்தை நாடதெ சுற்றும்

உடலையிரட் சிக்குமென வோது.”

இதனால் கழிச்சல் நோய்களும், வயிற்றை பற்றிய நோய்களும், குருதி நோய்களும், வளிக்குற்றப் பெருக்கால் வரும் நோய்களும் போம்.

Chemical constituents: Flavanoids, glycosides, phenylporpanoid glucose ether, fixed oil, saponin and alkaloids.

Medicinal properties: laxative, astringent.

Uses : Decotion of leaves useful in skin eruptions, and difficult labour, oil paste in pruritic conditions, seed oil internally given for itching and skin disease.

புங்குஎண்ணெய் - வெளிமருந்து

புங்கதைலம்



நல்லெண்ணை



வெட்பலையரிசி



வெள்ளைபாஷாணம்



PUNGU THYLUM

INGREDIENTS:

Pachai manjal	- 50 gm
Vellai paashanam	- 10 gm
Vetpalai arisi	- 200 gm
Pungu ennai	- 1 litre
Vallarai juice	- 1 litre
Gingely oil	- 1 litre

Method of preparation:

The powdered vetpalai seeds and the purified white arsenic were grinded with vallarai juice and then mixed with equal proportion of Pungu ennai, gingely oil and vallarai juice. Then the proportion is heated until it reaches the thylam consistency.

Reference: Yugi Muni Vaithiya Kaaviyam Pg.No -299

MANJAL (மஞ்சள்)

வேறு பெயர் - அரிசனம், கான், சனி, நீசி, பீதம்

Botanical name: Curcuma longa

Family: Zingiberaceae.

சுவை - கார்ப்பு, கைப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொது குணம்:

“பொன்னிறமாம் மேனி புலானாற்றமும் போகும்

மன்னு புரும வசியமாம் - பின்னியெழும்

வாந்தி பித்த தோடமையம் வாதம் போந் தீபனமாங்

கூர்ந்த மஞ்சளின் கிழங்குக்கே”

-அகத்தியர் குணவாகடம்

உடலில் பூசி குளிக்க உடல் பொன்னிறமாகும். புலால் நாற்றம் போகும். பசியுண்டாகும், வாந்தி, வளி, தீ, ஐயக்குற்றம், தலைவலி, நீரேற்றம், வெள்ளை, ஜவகை வலி, வீக்கம், வண்டுகடி, பெரும்புண் போகும்.

Chemical constituents: Curcumin, zingiberine, curcuminides, turmeric oil, aromatic oil,

Medicinal properties: Anthelmintic, anti parasitic, stomachic, carminative, stimulant, blood purifier, alteratiive, hepatic tonic.

Medicinal uses: Whooping cough, bleeding piles, leprosy, skin disease.

VALLARAI (வல்லாரை)

வேறு பெயர் - சண்டகி, பிண்டரி, யோசனவல்லி

Botanical name: Centella asiatica

Family - Apiaceae

சுவை - துவர்ப்பு, கைப்பு, இனிப்பு.

தன்மை - தட்பம்

பிரிவு - இனிப்பு

பொது குணம்:

“அக்கர நோய் மாறும் அகலும் வயிற்றிழி
தக்கவிரத் தக்கடுப்புத் தானேகும் - பக்கத்தில்
எல்லோரை யுமருந்தென் றேயுரைத்து நன்மனையுள்
வல்லாரை யைவளர்த்து வை.”

வாய்ப்புண், கழிச்சல், வெறி, யானைக்கால், மேகப்புண், காயம், கட்டி,
வீக்கம், படை, கண்டமாலை, சுதகக்கட்டு ஆகியன தீரும்.

Chemical constituents: Vallerine, asiaticoids, sitosterol, tannin, oxy asiaticocide, triterpene acids, alkaloids, flavanoids, and glycosides.

Medicinal properties: Anti bacterial, anti inflammatory, anti ulcerogenic, anxiolytic, cerebral tonic, circulatory stimulant, diuretic, antioxidant,.

Medicinal uses: Wound healing, leprosy, detoxification, relieve hypertension, immunomodulator.

GINGELY OIL (நல்லெண்ணெய்)

வேறு பெயர் - திலம்

Botanical name: Sesamum indicum

Family: Pedaliaceae

சுவை - இனிப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

பொதுக்குணம்:

“புத்தி நயனக் குளிர்ச்சி பூரிப்பு மெய்ப்புகைஞ்
சத்துவங் கந்தினியினமை - மெத்த வுண்டாங்
கண்ணோய் செவிநோய் கபாலவழல் காசநோய்
அண்ணோய் போமெண்ணெயாற் போற்று”

- அகத்தியர் குணவாகடம்

இத்தைலத்தை இரண்டு (அ) நாலு உச்சி கரண்டியளவு உள்ளுக்கு தர உடல் பூரிக்கும். தினவு, படை, சொறி, சிரங்கு, நீங்கி தோல் அழகு பெறும். இருமல் தணியும்.

Chemical constituents: Sesamin, sesamolin, phytosterol, Vit E, carbohydrates, fixed oil, myristic acid, palmitic acid, stearic acid, arachidic acid, oleic acid, linoleic acid.

PUNGU (புங்கு)

வேறு பெயர் - புங்கு, பூந்தி, கரஞ்சகம், கரஞ்சம்

Botanical name: Pongamia glabra

Family: Papilionaceae

சுவை - கைப்பு, துவர்ப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

புங்கு எண்ணெய்

செய்கை

Antiseptic

Stimulant

பொதுக்குணம்:

“புங்கு விதை காற்கிரந்தி புண் கரப்பான் காதெழுச்சி
அங்கசன்னி கண்ணோய்க்கும் ஆம்பேதி — யுறகட்டும்
காட்டுப்புங்கின் விதைக்கு கண்டதே மற்சொறியமேய்ப்
ஆட்டுப்புங் கின்வாய்வும் போம்.”

குணம் - இதனால் கால் புண், கிரந்தி, கரப்பான், காதுநோய், முப்பிணி, நீங்கும்.
காட்டுப்புங்கின் விதையினால், தேமலும், படையும், கீல்களைப் பற்றிய வாய்வும் போம்.

Chemical constituents: Glabrin, pongaopin, furanoflavones, karangin, pongamaol, beta sitosterol. Karangin is the active principle responsible for the curative effect of the oil in skin diseases.

Medicinal uses: Herpes, scabies, sores and eczema.

ARSENIC

English name: Arsenum

Chemical name: Acidum arsenioum

Characters: The by product, arsenious exists as solid, heavy white powder, minute transparent or glass like crystals. It is tasteless and soluble in water. Action: In very small doses it is stomachic, general and nervine tonic, alterative, anti periodic, cardiac, respiratory, intestinal and sexual stimulant.

Uses: It is used in variety of disease but chiefly in fever. To increase immunity from disease arsenic is administered in gradually increasing doses.

Externally, it is used to remove large growth as in cancer and in lupus.

BIOCHEMICAL ANALYSIS

Vatha karappan

ANNEXURE II

BIO-CHEMICAL ANALYSIS OF

PERUMARAPATTAI CHOORNAM

Preparation of the extract:

5gms of choornam was weighed accurately and placed in a 250ml clean beaker. Then 50ml of distilled water is added and dissolved well. Then it is boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it is made up to 100 ml with distilled water. This fluid is taken for analysis.

Qualitative analysis:

S.No	Experiment	Observation	Inference
1.	<u>TEST FOR CALCIUM</u> 2ml of the above prepared extract is taken in a clean test tube. Add 2 ml of 4% ammonium oxalate solution is added to it	A white precipitate is formed	Indicates the presence of calcium
2.	<u>TEST FOR SULPHATE</u> 2ml of the extract is added to 5% barium chloride solution	No white precipitate is formed	Absence of Sulphate
3.	<u>TEST FOR CHLORIDE</u> The extract is treated with silver nitrate solution	No white precipitate is formed	Absence of chloride
4.	<u>TEST FOR CARBONATE</u> The substance is treated with concentrated HCL.	No brisk effervescence is formed	Absence of Carbonate

5.	<u>TEST FOR STARCH</u> The extract is added with weak iodine solution	Blue colour is formed	Indicates the presence of starch.
6.	<u>TEST FOR IRON</u> <u>FERRIC:</u> The extract is treated with glacial acetic acid and potassium ferro cyanide.	No Blue color is formed	Absence of ferric Iron
7.	<u>TEST OF IRON FERROUS:</u> The extract is treated with concentrated nitric acid and ammonium thio cynate	No blood red colour is formed	Absence of ferrous iron.
8.	<u>TEST FOR PHOSPHATE</u> The extract is treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate is formed	Absence of phosphate
9.	<u>TEST FOR ALBUMIN</u> The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of Albumin.
10.	<u>TEST FOR TANNIC ACID.</u> The extract treated with Ferric Chloride reagent.	No blue back precipitate is formed.	Absence of Tannic acid.
11.	<u>TEST FOR UNSATURATION</u> Potassium permanganate solution is added to the extract.	It gets decolourised.	Indicates the presence of unsaturated compound.

12.	<p><u>TEST FOR THE REDUCING SUGAR.</u></p> <p>5ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.</p>	Colour change occurs.	Indicates the presence of Reducing Sugar.
13.	<p><u>TEST FOR AMINO ACID.</u></p> <p>One or two drops of the extract is placed on a filter paper and dried it well after drying 1% Ninhydrin is sprayed over the same and dried it well.</p>	Violet colour is formed.	Indicates the presence of Amino acid.
14.	<p><u>TEST FOR ZINC</u></p> <p>The extract is treated with potassium Ferrocyanide</p>	No white precipitate is formed	Absence of Zinc

Pharmacological Analysis

Vatha karappan

ANNEXURE-III
PHARMACOLOGICAL STUDIES
ANTI – HISTAMINIC STUDY OF PERUMARAPATTAI
CHLOORANAM

Aim:

To study the Anti – histaminic effect of Perumarapattai chooranam..

Preparation of the test drug:

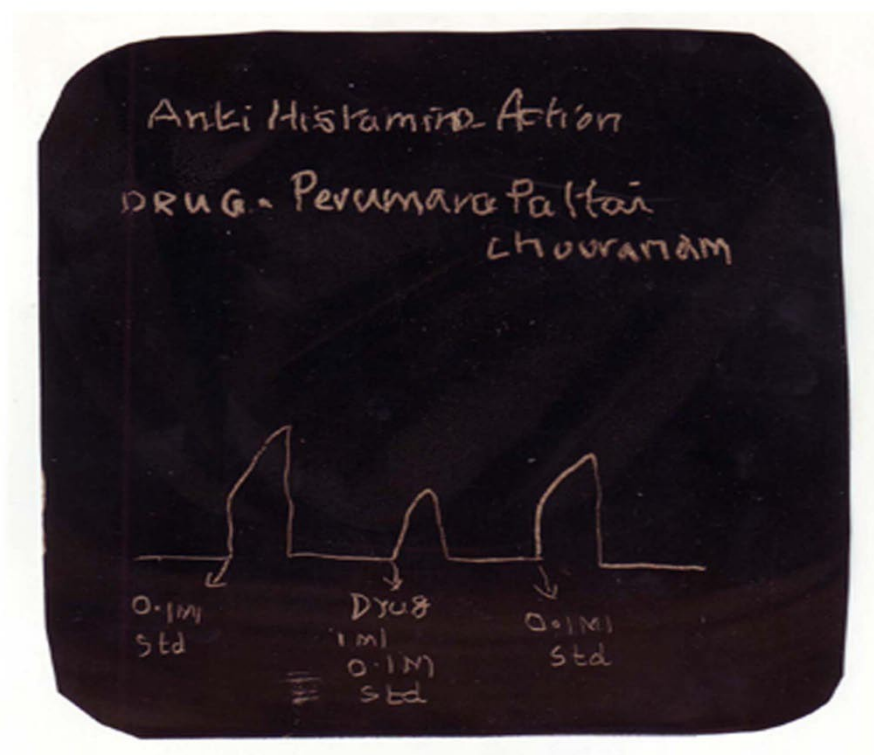
1gm of Perumarapattai chooranam was boiled with 20ml of water for 15 minutes. 2ml of decoction was taken as the test drug.

Procedure:

A guinea pig weighed about 350gm was starved for 48 hours. It was sacrificed by a blow on the head and external jugular vein was allowed to bleed. The abdomen was then cut and ileum was cut out and placed in a tray which contained warm tyrode solution (37⁰C) and continuously aerated. The contents of the lumen of the ileum were washed and utmost care was taken to avoid any damage to the gut muscle. An ileum segment having a length of about 3cm was taken and tied in both ends with thread. One end was tied in a 'j' tube and the other end was tied in a frontal lever. The tissue was put in an organ bath and the effects of drug on histamine induced contractions were recorded.

Inference: The drug Perumarapattai Chooranam has significant Anti-histamine action.

ANTI HISTAMINE ACTION OF PERUMARAPATTAI CHOORANAM



ACUTE ANTI-INFLAMMATORY STUDIES OF PERUMARAPATTAI CHOORANAM

Introduction:

In the Siddha System of Medicine, the drug under study is indicated in the condition of Karrappan Noi. Therefore, it was through appropriate screening the drug for its acute inflammatory activity with the help of carrageenin induced Hind-paw edema and for chronic anti-inflammatory activity cotton pellet granuloma method.

Aim:

To evaluate the acute anti-inflammatory effect of Perumarapattai Chooranam by Carrageenin induced hind paw oedema method in Albino rats.

Materials and Methods:

2 gms Perumarapattai Chooranam was suspended in 10ml of distilled water with gum acacia as suspending agent.

Carrageenin induced Hind Paw Method:

Six healthy albino rats of either sex weighing between 80-100 gm were selected. The volume of each hind paw was measured by using the mercury – plethysmograph.

After the measurement of hind paw of all the rats, they were divided into the groups each containing two rats.

First group was kept as control by giving distilled water 1ml/100gm of body weight. The second group was given Ibuprofen 20mg/100gm body, weight and

kept as standard. Third group was given test drug Perumarapattai Chooranam 200gm/100gm body weight.

The drugs were administered orally. One hour after drug administration, 0.1ml 1% (w/v) of carrageenin suspension in water injected in the plantar surface of Hind Paw of all rats.

Three hour after carrageenin injection the hind paw volume was measured once again. From the differences in the initial and final hind paw volume, the degree of the inflammation was calculated by taking the volume in the untreated control group as 100%.

The percentage of inflammation of the other group was calculated.

Results:

The details of the experimental results shown in the table.

EFFECT OF PERUMARAPATTAI CHOORANAM

Group	Drugs	Dose/ 100gm of body weight	Initial value	Final value	Mean difference	% Inflammation	% Inhibition
Control	Water	2ml	0.55	1.45	0.9	100	-
Standard	Ibuprofen	20mg/2ml	0.55	0.75	0.20	22.2	77.8
Test Drug	Perumarapattai Chooranam	100mg/2ml	0.45	0.75	0.37	33.0	67.0

Inference:

The test drug Perumarapattai Chooranam has **Significant** Acute Anti – inflammmtory action.

CHRONIC ANTI – INFLAMMATORY EFFECT OF PERUMARAPATTAI CHOORANAM

Aim:

To evaluate the chronic anti-inflammatory effect of Perumarapattai Chooranam in rats by cotton pellets granuloma method.

Materials and method:

Drug preparation:

1gm of Perumarapattai Chooranam was suspended in 10ml of distilled water with gum acacia as suspending agent.

Cotton pellet Granuloma method:

Procedure:

Six healthy albino rats of either sex weighing between 80-100 gm were selected and divided into 3 groups each containing 2 rats.

In this procedure the drugs were given daily for 7 days. Before giving the drug cotton pellets each weighing 10 mg were prepared and sterilized in an autoclave for about one hour under 15 Pounds atmospheric pressure.

On the day of experiment, each rat was anaesthetised with ether to implant 10mg of sterilized cotton pellet subcutaneously in the lower abdomen two on each side after making suitable incision and sutured carefully.

First group was kept as control group by giving distilled water of 2ml/100gm of body weight. To the second group the standard drug Ibuprofen in a dose of 20mg/100gm of body weight was given.

The third group of animals was given tested drug Perumarapattai Chooranam in a dose of 200mg/100g of body weight.

On the 8th day of the experiment, all the rats were sacrificed and cotton pellets found to be surrounded by granulation tissue were removed and dried in hot air oven at 55⁰C-60⁰C.

Results:

The details of the experimental results are shown in the table.

EFFECT OF PERUMARAPATTAI CHOORANAM

Groups	Dose/ 100gm body weight	Pellet weight	Pellet weight of the granuloma of drugs	% inflammation	% inhibition
Water	1ml	10mg	250mg	100	-
Ibu Brufen	20mg/2ml	10mg	55mg	22	78
Perumarapattai Chooranam	2ml	10mg	125mg	50	50

Result:

The test drug **Perumarapattai Chooranam** has Significant Chronic Anti – inflammatory action.

ACUTE ANTI-INFLAMMATORY STUDY OF
PUNGU THYLAM (Externally)
BY HINDPAW METHOD IN ALBINO RATS

Procedure:

Anti-inflammatory activity of Pungu Thylam was studied in healthy albino rats.

Six rats were selected and divided into three groups. To the first group distilled water was given and kept as control. The second group was given the standard drug Ibuprofen at a dose of 20mg/ 100gm body weight. The third group was treated with the test drug externally. Before the application of the drug the hindpaw volume of all rats was measured. This was done by dipping the hindpaw upto the tibio dorsal junction in a mercury plethysmography. Subcutaneous injection of 0.1 ml of 1% w/v carrageenin in water was made into plantar surface of both the hindpaw of each rat. Three hours after injection, the hindpaw volume was measured once again. The difference between the initial and final volume would show the amount of inflammation.

Taking the volume in the control group as 100% of inflammation, the inflammatory or anti-inflammatory effect of the test group is calculated.

EFFECT OF PUNGU THYLUM

Group	Drugs	Dose/ 100gm of body weight	Initial value	Final value	Mean difference	% Inflammation	% Inhibition
Control	Water	2ml	0.55	1.45	0.9	100	-
Standard	Ibuprofen	20mg/2ml	0.55	0.75	0.20	22.2	77.8
Test Drug		-	0.55	1.0	0.45	50.0	50.0

Inference:

It is observed that Pungu Thylam has significant Acute Anti-inflammatory action.

ANNEXURE – 4

ASSESSMENT FORM

- | | |
|------------------|---|
| FORM I | - SCREENING & SELECTION PROFORMA |
| FORM I A | - HISTORY PROFORMA ON ENROLLMENT |
| FORM II | - CLINICAL ASSESSMENT ON ENROLLMENT |
| FORM II A | - CLINICAL ASSESSMENT DURING & AFTER TRIAL |
| FORM III | - LABORATORY INVESTIGATION ON
ENROLLMENT & CONCLUSION OF TRIAL |
| FORM IV | - CONSENT FORM |
| FORM IV A | - WITHDRAWAL FORM |
| FORM IV B | - DRUG COMPLIANCE FORM |

GOVERNMENT SIDDHA MEDICAL COLLEGE & HOSPITAL
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PALAYAMKOTTAI

Branch – III Sirappu Maruthuvam

A PILOT STUDY TO EVALUATE THE THERAPEUTIC EFFICACY OF
SIDDHA FORMULATION **PERUMARAPATTAI CHOORANAM**
(INTERNAL) AND **PUNGU THYLAM** (EXTERNAL IN **VATHA**
KARAPPAN (ECZEMA).

FORM I - SCREENING & SELECTION PROFORMA

1. **OP /IP NO:**
2. **NAME:**
3. **RELIGION: H / C / M / O**
4. **AGE/GENDER:**
5. **OCCUPATION:**
6. **INCOME:**
7. **CONTACT NUM:**
8. **INCLUSION CRITERIA**
 - Age :15-70 yrs
 - Sex : Both male and female
 - Willing to give specimen of blood for the investigation whenever required.
 - Willing for admission and study in IPD for 40 days or willing to attend OPD

9. EXCLUSION CRITERIA:

- Age below 15 and above 70
- Pregnant and lactating women
- Other than Eczema
- STD
- HIV

ADMITTED TO TRAIL:

If Yes Serial NO:

YES

NO

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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FORM I A -HISTORY PROFORMA

1. SI NO:
- 2 OP /IP NO:
3. NAME :
4. RELIGION : H / C / M / O
5. AGE/GENDER:
6. OCCUPATION:
7. INCOME.:
8. CONTACT NUM:
9. MARITAL STATUS: Married/Unmarried
10. COMPLAINTS & DURATION:
11. PERSONAL HISTORY:

PERSONAL HABITS	YES	NO	IF YES SPECIFY DURATION
Smoking			
Tobacco Chewing			
Alcohol			
Narcotic Drug Addiction			

12. DRUG HISTORY: Whether the Patient has underwent any allopathic Treatment Yes/No,

If yes specify the nature of the drug and treatment duration

13. FAMILY HISTORY:

Whether this problem runs in family?

1. Yes

2.No

If yes, mention the relationship of affected person(s)

1. _____

2. _____

14.DIETARY HABITS

1.Pure vegetarian ☐

2.Non-Vegetarian ☐

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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KARAPPAN (ECZEMA).**

**FORM II AND II-A CLINICAL ASSESSMENT ON ENROLLMENT AND
ON VISITS**

- 1. OP/ IP No:**
- 2. BED No:**
- 3. Sl. No:**
- 4. NAME:**
- 5. AGE:**
- 6. GENDER:**
- 7. OCCUPATION:**
- 8. SOCIAL STATUS:**
- 9. DATE OF ADMISSION:**
- 10. DATE OF DISCHARGE:**
- 11. POSTAL ADDRESS:**
- 12. COMPLAINTS & DURATION:**
- 13. HISTORY OF PRESENT ILLNESS:**
- 14. PAST HISTORY:**

15. FAMILY HISTORY:

16. MENSTRUAL HISTORY (If applicable):

17. HABITS:

1. Smoker
2. Alcoholic
3. tobacco chewer
4. betel nut chewer
5. Non-Vegetarian
6. Drug addiction

18. GENERAL EXAMINATION:

1. Body weight [Kg]
2. Height [cm]
3. Body Temperature [F]
4. Blood Pressure (mmHg)
5. Pulse Rate /min.
6. Heart Rate /min.
7. Respiratory Rate /min.
8. Pallor
9. Jaundice
10. Clubbing
11. Cyanosis
12. Pedal Oedema
13. Lymphadenopathy
14. Jugular venous pulsation

19. CLINICAL EXAMINATION:

I. INSPECTION:

- Size
- Shape

- Colour
- Border
- Edge
- Margin
- Discharge

II.PALPATION

- Tenderness
- Edge and margin
- Surface

III. CLINICAL ASSESSMENT:

- Erythema
- Oozing
- Itching
- Vesicles
- Pustules

20. EXAMINATION OF OTHER SYSTEMS:

1. CVS
2. RS
3. CNS
4. ABDOMEN
5. GENITO-URINARY

EXAMINATION - SIDDHA ASPECTS

1 . NILAM:

1. Kuringi
2. Mullai
3. Marutham
4. Neithal
5. Paalai

2 . KAALAM:

- | | | |
|-------------------|--------------------|---------------------|
| 1. Kaar Kaalam | 2. Koothir Kaalam | 3. Munpani Kaalam |
| 4. Pinpani Kaalam | 5. Ilavenir Kaalam | 6. Muduvenir Kaalam |

3. YAAKKAI:

- | | | |
|----------------|----------------|---------------|
| 1. Vatham | 2. Pitham | 3. Kabam |
| 4. Vathapitham | 5. Pithavatham | 6. Kabavatham |
| 7. Vathakabam | 8. Pithakabam | 9. Kabapitham |

4. GUNAM:

- | | | |
|-------------|-------------|-------------|
| 1. Sathuvam | 2. Rasatham | 3. Thamasam |
|-------------|-------------|-------------|

5. KANMENDHIRIUM / KANMAVIDAYAM

1. Kai
2. Kaal
3. Vaai
4. Eruvaai
5. Karuvaai

6. UYIR THATHUKKAL:

I. VATHAM:

1. Piraanan
2. Abaanan
3. Viyaanan
4. Uthaanan
5. Samaanan
6. Naagan
7. Koorman

8. Kirukaran
9. Devathathan
10. Dhananjeyan

II. PITHAM :

1. Analam
2. Ranjagam
3. Saathagam
4. Aalosagam
5. Praasagam

III. KABAM:

1. Avalambagam
2. Kilethagam
3. Pothagam
4. Tharpagam
5. Santhigam

7. UDAL THAATHUKKAL:

1. Saaram
2. Senneer
3. Oon
4. Kozhuppu
5. Enbu
6. Moolai
7. Sukkilam / Suronitham

8. ENVAGAI THERVUGAL:

1. Naadi
2. Sparisam
3. Naa
4. Niram

5. Mozhi

6. Vizhi

7. Malam

Niram: Thanmai: Irugal: Ilagal :

8. Moothiram:

I. NEERKURI:

a. Niram

b. Manam

c. Edai

d. Nurai

e. Enjal

II. NEIKURI:

Vatha Neer

Pitha Neer

Kaba Neer

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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FORM III - LABORATORY INVESTIGATION

INVESTIGATION:

I.BLOOD:

1. TC : (Cells/Cumm)
2. DC (%): N L M E
3. ESR (mm) : ½ hr ,1 hr
4. Hb:
5. Blood Sugar: a) Fasting b) Post Prandial c) Random
6. Total RBC count
7. Serum cholesterol
8. Blood urea
9. Serum creatinine

2.URINE:

- Albumin
- Sugar
- Deposits

II. SPECIFIC INVESTIGATIONS

1. Skin scrapping test for fungus
2. Bacterial and viral swab for microscopy and culture
3. Patch and prick test
4. Specific IgE test

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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FORM IV A - CONSENT FORM

CERTIFICATE BY INVESTIGATOR

I certify that I have disclosed all the details about the study in the terms readily understood by the patient.

Signature.....

Date.....

Name.....

CONSENT BY PATIENT

I have been informed to my satisfaction, by attending physician, the purpose of the clinical trial, and the nature of drug treatment and follow-up including the laboratory investigations to be performed to monitor and safeguard my body functions.

I am aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

I exercising my free power of choice, hereby give my consent to be included as a subject in the clinical trial of 'Perumarapattai chooranam' (internal) and 'Pungu thylam' (external) in Vatha karappan.

Place:

Signature

Date:

Name

Witness

அரசினர் சித்த மருத்துவக் கல்லூரி மற்றும் மருத்துவமனை

பாளையங்கோட்டை

பட்டமேற்படிப்பு சிறப்புமருத்துவத்துறை

“பெருமரப்பட்டை சூரணம்” (உள்மருந்து) மற்றும் “புங்கஎண்ணெய்” (வெளிமருந்து) இவற்றின் பரிகரிப்புத்திறனைக் கண்டறியும் மருத்துவ ஆய்வுஒப்புதல் படிவம் ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் இந்த ஆய்வைக் குறித்த அனைத்து விபரங்களையும் நோயாளிக்கு புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி:

கையொப்பம்:

இடம்:

பெயர்:

நோயாளியின் ஒப்புதல்

என்னிடம் இந்த மருத்துவ ஆய்வின் காரணத்தையும் மருந்தின் தன்மை மற்றும் மருத்துவ வழிமுறையைப் பற்றியும் தொடர்ந்து எனது உடல் இயக்கத்தை கண்காணிக்கவும், அதனைப் பாதுகாக்கவும் பயன்படும் மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றியும் திருப்தி அளிக்கும் வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் இந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல் எப்பொழுது வேண்டுமானாலும் இந்த ஆய்விலிருந்து என்னை விடுவித்துக் கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

நான் என்னுடைய சுதந்திரமாகத் தேர்வு செய்யும் உரிமையைக் கொண்டு ‘வாதகரப்பான் என்னும் நோய்க்கான் பெருமரப்பட்டை சூரணம்” (உள்மருந்து) மற்றும் “ புங்கஎண்ணெய் ” (வெளிமருந்து) இவற்றின் பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

தேதி:

கையொப்பம்:

இடம்:

பெயர்:

சாட்சிக்காரர் கையொப்பம்:

பெயர்:

GOVERNMENT SIDDHA MEDICAL COLLEGE & HOSPITAL

POST GRADUATE DEPARTMENT

PALAYAMKOTTAI

Branch – III Sirappu Maruthuvam

**A PILOT STUDY TO EVALUATE THE THERAPEUTIC EFFICACY OF
SIDDHA FORMULATION PERUMARAPATTAI CHOORANAM
(INTERNAL) AND PUNGU THYLAM(EXTERNAL) IN VATHA
KARAPPAN (ECZEMA).**

FORM IV B - WITHDRAWAL FORM

1. SI NO:

2. OP /IP NO:

3. NAME:

4. RELIGION : H / C / M / O

5. AGE/GENDER:

6. OCCUPATION:

7. SOCIAL STATUS:

8. CONTACT NUM:

9. DATE OF TRIAL COMMENCEMENT:

10. DATE OF WITHDRAWAL FROM TRIAL:

11. REASONS FOR WITHDRAWAL:

Long absence at reporting:

Yes/ No

• Irregular treatment:

Yes/ No

• Shift of locality :

Yes/ No

• Increase in severity of symptoms:

Yes/ No

• Development of severe adverse drug reactions:

Yes/ No

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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FORM IV C - DRUG COMPLIANCE FORM

Name of the Drug: **PERUMARAPATTAI CHOORANAM (INTERNAL) AND**
PUNGU THYLAM (EXTERNAL)

Drugs issued : (Mgs/Grams)

Drugs returned : (Mgs/Grams)

S.NO	DATE	DRUG TAKEN TIME	
		MORNING/TIME	EVENING/TIME
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Upto 48 Days			

After 7 days medicine 5 days resting period will be given to the patients.

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

Bibliography

Vatha karappan

BIBLIOGRAPHY

- யூகி வைத்திய சிந்தாமணி
- அகத்தியர் 2000
- அகத்தியர் குருநாடி நூல்
- அகத்தியர் பதார்த்த குணசிந்தாமணி
- செகராச சேகர வைத்தியம்
- அகத்தியர் ஆயுள் வேதம்-1200
- அகத்தியர் விரண நூல்
- அகத்தியர் அட்டவணை வாகடம்-திரு.க.அரங்கராசன் BIM.,
- நோய் நாடல் நோய் முதல் நாடல் பாகம் I- மரு. சண்முகவேலு
- சித்த மருத்துவம் சிறப்பு- மரு.ஆர்.தியாகராஜன் LIM.,
- குணபாடம் மூலிகை வகுப்பு -மரு.ஆர்.தியாகராஜன் LIM.,
- மருத்துவ தாவரவியல் ஆசிரியர்-Dr.S.Somasundaram M.Sc., Ph.d.,
- குணபாடம் தாது ஜீவ வகுப்பு - மரு.மு.முருகேச முதலியார்
- Taxonomy of Angiosperms- **Dr.S.Somasundaram M.Sc., Ph.d.,**
- Tamilnadu medicinal plants-**MR.S.N.Yoganarashimhan**
- The wealth of India
- Indian material medica-**DR.K.N.Nadkarani**
- Text book of Microbiology-**Anantha Narayanan and Paniker**
- Davidson's principle and practice
- Robinson's pathology
- Roxburg's common skin disease-**Kirby**
- Practice of dermatology-**P.N.Bhel**
- www.medicinenet.com
- www.medscape.com
- www.wikipedia.org